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American Railroad Journal.

Saturday, February 14, 1852.

Corporate Subscriptions to Railroad Companies.

We publish this week the opinion of the Supreme Court of Kentucky, sustaining the subscription of Mason county, in that State, to the Maysville and Lexington railroad. We give the opinion entire, that our readers may see all the grounds upon which it is based. The decision is an important one, as applicable not only to the numerous issues of the Kentucky county bonds, but from the influence that it will be likely to exert upon the courts of other States, where similar questions may be raised.

The result in the above case has established no new principle in the law of the country, but is nearly a re-affirmation of the discussions of other States where the question has come up for adjudication. In the older States, the competency of cities and counties to subscribe in their corporate capacity to works of general improvement has long been acquiesced in; this acquiescence being based upon repeated decisions sustaining this power.—The right of a city to execute works which have for their object the general good and convenience, is one of the necessary results of all social organizations. Take the case of the New York Water

Works. The water furnished by them, is not, strictly speaking, an indispensable necessity, but a great luxury and convenience. Private enterprise was not equal to the task of bringing water from the Croton river into the city. It was necessary for the city, in its corporate capacity, to assume the work, though the project was opposed by a very large body of our citizens, on the ground that they were well supplied with water already, and were unwilling to assume a burden which benefited others alone. The majority decided in favor of water, and the opponents of the measure were compelled to contribute their proportion to secure its success. By our organic laws, the will of the majority stands for the will of the whole. If there is any hardship in this, it is one inherent in the principle upon which all our institutions are founded.

This principle, as already stated, is of universal appreciation. Upon it are based nearly all our works of a public character, such as railroads, canals, water works, public highways, etc., etc.—There is not a town in the United States of any considerable importance that has not made large appropriations to one or the other of these works, which could never have been executed without such aid. The competency of the majority to bind the minority, and force contributions from them towards the construction of works of a declared public utility, has been questioned over and over again; but the decisions have been unanimous in confirmation of this right. We must expect that in all the new States, as well as in the old, the question will continue to be raised till it is finally settled by the highest legal tribunal of each State.

In the eastern States, the case most commonly referred to as settling this question is that of *Rose vs. Inhabitants of Bridgeport*, in Connecticut. That city borrowed money in its corporate capacity, to aid the construction of the Housatonic railroad.—The inducement to this, was the expected advantage to be derived by the city from being made the terminus of the road. The enterprise, instead of coming up to public expectation, proved disastrous, and the city, in consequence, refused to pay the liability assumed for the above purpose. The creditor, thereupon, commenced a suit and recovered judgment for the amount due him, against the city in its corporate capacity. There being no public property of the city that could be reached, the cred-

itor proceeded to levy his execution upon the private property of individual citizens, and to accomplish this object, was compelled, under direction of the sheriff, to break into a number of stores, and take therefrom large quantities of personal property. The citizens, whose property was taken, brought actions of *Replevin* against the sheriff, and in this manner the whole matter was brought before the Supreme Court in the State. The court decided the law to be not only constitutional, but that the private property of each individual was held for the corporate debts of a city or county of which he might be a member. Such is now the recognised law of the land. Upon recovering judgment against a city or a county, the creditor may seize the property of an individual member, who in turn has his remedy by an action, either against the corporation, or against the different members of it, to compel them to contribute their proportion of the amount paid.

The same question was recently raised in the State of Maine, in the matter of the subscription of the city of Gardiner to the Portland and Kennebec railroad, and Judge Ware of the U. States District Court, sustained the subscription upon the grounds already stated.

Of the reasonableness of the proposition in the abstract, that a majority may bind the minority to works of manifest public improvement, we believe there can be no doubt. In its application, it is the very corner stone upon which our institutions and laws are based. Its practicable application is seen on every side. All our cities, from the largest to the smallest, have affirmed it by their acts, over and over again. The city of Albany subscribed a large sum to the Western railroad. The city of Baltimore now owns nearly \$4,000,000 of stock in the Baltimore and Ohio railroad. Philadelphia, in its corporate capacity, has contributed a large sum to the Pennsylvania Central railroad. So has Pittsburg to the same object. We merely instance these cities as prominent illustrations of the principle stated. The securities issued by them are now, and have ever been, regarded, as the very best ever offered in this market.

Our friends, purchasing county securities, must expect that the question of their validity will be raised in every State where it has not been definitely settled. At home, these questions create no apprehension, nor detract from the value of the se-

curity; as the law upon the subject is too well established to raise a doubt as to their legality, and we merely make the above remarks to relieve any anxiety that may be excited abroad by our publishing articles having reference to county subscriptions. In the older States, all these questions have been forever laid at rest, by repeated adjudications of the proper tribunals. The decision of the Supreme Court of Kentucky is but an affirmation of the law there.

As a general rule, it may be stated that the authority of a majority to bind the minority of a city or county, is in exact harmony with our whole system. With us, all power rests in the majority. In Europe, for instance, the power of the State has either been assumed by, or has been permanently delegated to the few individuals that constitute the government. With us, the power of the majority to carry out works of public improvement has only been used for beneficent objects, and our friends everywhere may rest assured that as far as the validity of the securities named are concerned, they are beyond a doubt. Of their intrinsic value, and we believe them to be superior to most offered in our market, we shall take occasion to speak in our next.

Western Railroad.

The directors of the Western railroad corporation have issued the report of their acts and doings, receipts and expenditures, for the year ending November, 1851. We subjoin the following table, exhibiting the aggregates of receipts and expenditures for the time specified.

The income of the road for the year was as follows:

From passengers.....	\$603,207 05
From freight.....	714,362 92
From other sources.....	36,324 66

Total..... 1,353,894 63

EXPENSES.

Repairs of road.....	\$122,719 32
" engines.....	36,949 96
" freight and passenger cars.....	70,070 04
" buildings.....	11,318 03
Transportation expenses.....	328,815 27
General expenses.....	27,883 58

Net earnings for the year..... \$597,756 20

From this deduct the following payments, viz:

Balance of interest.....	\$282,548 93
Two dividends, 4 per cent each.....	412,000 00
Payment to sinking funds.....	50,000 00
Loss on Pittsfield and North Adams road.....	5,497 68

Surplus carried to contingent fund, 1851.....	6,091 82
Add balance to credit of do., Nov. 30, 1850.....	122,029 69

Total amount of contingent fund November 30, 1851..... \$128,121 51

The general result of the year's work, as compared with the work of the preceding year, will appear thus:

	Passengers.	Freight.	Other sources.	Total.
1850....	\$590,743	\$740,493	\$35,015	\$1,366,252
1851....	603,207	714,362	36,324	1,353,894
Increase	12,464	1,309
Decrease	26,131	12,358

The receipts of the Pittsfield and North Adams railroad, a branch of the Western, were, for passengers, \$17,131 81; freight, \$19,483 51; other sources, \$900. The aggregate expenses were \$16,-

012; net income, \$21,502 32. The payment of 6 per cent on the stock, which is guaranteed, in two dividends of 3 per cent, amount to \$27,000, leaving a deficiency to be charged to the guarantee fund account of \$5,497 68. The business yielded \$4,909 gross revenue more than it did in 1850, but the increased expenses left the net revenue only \$2,553 larger than in that year.

The value of the Massachusetts sinking fund at the close of the year 1850 was \$614,090 48; increase in 1851, \$77,507 09; total value at the end of last year, \$691,597 57. The increase of the Albany sinking fund was \$24,816 27, making its total value \$318,368 82; aggregate value of both funds, \$1,009,966 39. The total increase of the sinking funds was \$104,805 79.

The floating debt of the corporation, which, on the 1st December, 1850, amounted to \$101,500, was entirely extinguished prior to 30th November, 1851; and on the 17th December, when the dividend statement was made up, the cash and cash assets in the hands of the treasurer amounted to \$313,621.

Arrangements have been made with the Harlem railroad company for doing their work between Chatham Four Corners and Albany. Twelve and a half miles of track, between Middlefield and Pittsfield, have been relaid with 70 lb. rail.

The total cost of the Western and Albany, and West Stockbridge railroads, to November 30, 1851, was \$9,953,758 84. The total number of shares issued by the corporation is 51,500.

Railroad to Mt. Carmel and Albion.

We are glad to see that the Mt. Carmel Register is earnestly advocating a railroad from that place to Albion, and a branch to Princeton, to tap the Evansville and Illinois railroad. It correctly concludes, we think, that such a road would pay a handsome dividend. Certainly a road which would, by connecting with the Evansville and Illinois railroad, unite the rich and populous country in the neighborhoods of Mt. Carmel and Albion, with the Ohio river at Evansville, and with the upper Wabash at Vincennes and Terre Haute, and thus eventually with the railroads of Indianapolis, must pay a good dividend, and prove highly beneficial to that region of country. It appears that inquiries have been made of the directors of our road, in reference to the Mt. Carmel and Princeton road.—Mr. Ingle thus writes in reply:

"In behalf of our directors, I will venture to say, that I have no doubt but the completion and equipping of a railroad from Mt. Carmel to Albion would insure the almost immediate construction of the branch road in question."—(Alluding to the road between Mt. Carmel and Princeton.)

"In answer to the question whether our railroad would aid in constructing the branch road, I would say that our railroad would be so deeply interested in the matter, that it would doubtless aid to the extent of its ability in constructing the branch."

Such a branch of our railroad, connecting us with the rich and highly productive country about Albion and Mt. Carmel, should certainly be a great object to the Evansville and Illinois railroad company. A vast quantity of the wholesale business of Evansville depends upon that very region, more than upon any other. A railroad connection with it would be more than merely desirable. It should be sought, and sacrifices made or assistance offered to obtain it. Not only would our own railroad be greatly benefitted by it, but the business interests of Evansville would be directly and wonderfully advanced by such an improvement. And certainly the business men of Mt. Carmel and Albion, and the farmers of that region, could do nothing

better for themselves, than to urge forward such an enterprise with their whole strength. By common energy and enterprise, they may build such a road, which would be actually more beneficial to them and their interests, than a railroad to Alton, costing vastly more, and which they unassisted cannot build, although we should like to see that road pushed ahead. This road is within their capabilities, and may be built in a short time, and soon be working its useful purposes. Let the Mt. Carmel folks go to work, either to build a road to Princeton or to Albion—to Albion if they will, which must soon establish a branch to Princeton, or to Princeton direct, which will secure the full enterprise of Albion to secure a portion of its benefits.—*Illinois paper.*

Ohio and Mississippi Railroad Commenced.

Yesterday Judge A. T. Ellis and Professor O. M. Mitchell, directors of this company, and Mr. Seymour, the contractor for the construction of the road, reached the city, and are sojourning at the Planter's House. They are accompanied by Mr. Trousdale, himself an eminent contractor, and who will probably sub-contract under Messrs. Seymour & Co. for the grading and bridging of the entire line from Illinois to Vincennes. The party came through by the stage. The trip furnished Mr. Seymour with an opportunity to comprehend more directly the character of the route. We are informed that across Illinois he regards the road as of easy construction; so much so that it is contemplated, although his contract with the company does not require such alacrity to complete the work from the Mississippi to the Wabash, in twelve or at most eighteen months. We hope this expectation may be realized.

By the charter of Messrs. Seymour & Co., with the President and directors of the company, it is stipulated that the construction of the road shall be commenced on or before the first day of February inst. On Saturday last, Mr. Morris, the Engineer for the contractors, accordingly commenced the construction by breaking ground in Illinois-town. This was necessary on the part of the contractors to save the contract. The road has, therefore, been commenced.

By the charter, the company are compelled to commence the construction at two points, viz:—Illinoistown and a point contiguous to the line of the Central railroad, on or before the 12th inst. The board of directors hold a regular meeting on the 4th inst., in this city, at which it is expected, there will be a full attendance of the directors.

For our favored and cherished city, we regard the commencement of this road with extreme pleasure. It will prove the means of establishing us on the great highway of the world, and will make St. Louis the central point for the Pacific route.—We are gratified in another aspect. The beginning of the work by the contractors, gives assurance that they intend to carry out their contract and complete the road as they have stipulated.—*St. Louis Republican.*

South Carolina.

South Carolina Railroad.—It appears from the annual report of the President and board of directors of the South Carolina railroad company, published in the Charleston papers, that the gross receipts of the road for the last year, from all sources, are \$1,000,000—being an increase of \$200,000.—Expense of working the road about 35 per centum of the earnings. After paying the interest on the debts due by the company, and reserving a fund of \$180,000, a dividend of 7 per cent has been declared.

Ohio and Mississippi Railroad.

The sum of \$600,000 voted by the city of Cincinnati to the above company has been accepted by it and the bonds of the city to that amount have been placed at the disposal of the directors of the company.

Kentucky.

Railroad Law.—The following is the opinion of the Court of Appeals, delivered by Judge Marshall, in the case of *Slack, etc., vs. Maysville and Lexington Railroad Company*:

The 28th section of the act of March, 1850, incorporating the Maysville and Lexington railroad company, enacts "that the cities of Maysville and Lexington, and the counties of Mason, Nicholas, Bourbon and Fayette, and any other city, county or corporation, be and they are hereby permitted to hold stock in the corporation created by this act, upon the same terms, on the same conditions, and subject to the same restrictions, with other stockholders." It then fixes the maximum of stock which may be subscribed under this authority, as follows, viz: by Maysville, \$150,000; by Lexington, \$150,000; by Maysville and Mason county, jointly, \$150,000; by Nicholas county, \$100,000; by Fayette county, \$200,000; and by any other city, county or corporation any sum not exceeding the largest of these amounts; and the President and directors of the company are authorised, after giving six weeks' notice by advertisement, in the manner prescribed, "upon a day named in said advertisement, to take the sense of the qualified voters of said cities or counties, or of any one or more of them, as to the policy of said cities and counties, or any one of them becoming subscribers to the stock in said railroad company to any amount which may have been proposed in said printed notice, not exceeding the respective sums above specified." It is then made the duty of the mayor and council of each of the cities of Maysville and Lexington, and the duty of the county court in each of the counties above named, to open columns in the various precincts, etc., and take all necessary measures to ascertain the sense of the qualified voters of their respective cities and counties at the polls thereof, as aforesaid, "and provided a majority of all the qualified voters of any of said cities or counties, who shall have cast their votes at said election shall be in favor of said several subscriptions of stock as proposed to such city or county, it shall be the duty of the mayor and council of every such city to pass an ordinance directing the mayor to subscribe for any amount of stock provided for in the ordinance, not exceeding the amounts in said printed notice, and it shall be the duty of the county court of every such county in like manner to empower and direct their clerk to subscribe for the amount of stock authorised by the voters of the county, not exceeding the sum specified in said printed notice; and it shall be lawful for said cities and counties, so authorising subscriptions, etc., to raise the amount of their separate subscriptions as the same shall be called by the president and directors of said road, by a tax on the real and personal estate of the said several cities and counties subscribing, or by borrowing the amount thereof, payable in the way, and on the terms, the said several mayors and councils, and the said several county courts may deem most advisable, and the interest on all such sums borrowed may be provided for in such manner as to them seems best; and provided that all sums paid by any citizen on account of such subscription, or of the interest thereon, shall entitle him to a certificate therefor, and when such certificates amount to fifty dollars, shall entitle him to one share in the stock subscribed by said city or county, for every fifty dollars so held by him, (the shares in the capital stock being fifty dollars each.)

Towards the close of the year 1850, the president and directors of the railroad company gave notice, by advertisement as required, for taking the sense of the voters of Mason county, including the city of Maysville, on the fourth Monday in January following, as to the policy of a subscription of stock by that county to the amount of \$150,000, under the foregoing provisions of the charter. The county court of Mason, at its December and January terms, made provision for taking and returning the vote. And at its February term, 1851, being on the 10th day of February, the votes from the several precincts being returned, and it being ascertained that the whole number of votes cast was 2,113, of which 1,328 were given for, and 785 against the subscription, making a majority of 543 in favor of it, the court made an order directing its clerk to subscribe on behalf of the county \$150,000 in stock

in said company, and to issue the bonds of the county for that sum, payable in thirty years, in bonds not exceeding \$1,000 each, bearing six per cent. interest per annum, payable annually, and to be delivered to the president and directors as called for, not exceeding \$50,000 per year.

On the 17th of February, 1851, the Legislature, by amendment to the charter of the company, authorised the county court of any county or the council of any city who shall subscribe stock in said company under the provisions of the original act, to execute bonds of the county or city to the president and directors for the amounts severally subscribed, payable at such times as the county court and city councils may deem best, and authorised and required them severally to levy and collect upon the real and personal property of said counties and cities assessed for State taxation, an amount in money sufficient annually to pay off the interest on said bonds. This act also provides for the mode of levying and accounting for the tax, also for the negotiability and transfer of the bonds by endorsement of the president, countersigned by the secretary, and for the transfer of certificates given to tax payers, and that the stock issued on such certificates shall not be deducted from the county or city stock. Other minor provisions need not be stated.

Prior to this enactment no bonds had been issued by the county court of Mason. And although a general order had passed for their being issued by the clerk, yet as the mode of executing them had not been prescribed, we suppose he had no authority without the further order of the court. At the May term, 1851, however, an order was made that the senior justice should sign bonds to the amount of \$20,000 to be countersigned and sealed by the clerk, and delivered to the company in payment of so much of the stock subscribed. At the same term an order was made for the levy and collection of a tax of 34 cents on the \$100 worth of real and personal property in the county assessed for State taxation, for the purpose of paying interest on the bonds. And at the same time the court recommended that the bonds should be made payable in New York, and should bear interest, payable semi-annually, in the same city.

This was the last session of the old county court. In August, 1851, the presiding judge of the county court, acting under the present constitution, adopted the recommendation of the former court, revoked and cancelled the bonds for \$20,000 before referred to, and provided that bonds to the amount of \$50,000, payable in the city of New York, with coupons for interest, payable semi-annually in the same city, should be issued to the company by the presiding judge, to be countersigned and sealed by the clerk—the coupons to be signed by the clerk.

On the 29th of September, 1851—the tax levied in May of that year being in course of collection—Jacob Slack and 150 other citizens and tax payers of Mason county, owning taxable property to the value of more than \$900,000, and more than one-tenth of the entire taxable property of the county, and who had been opposed to the subscription, filed their petition complaining of the tax as oppressive, illegal and unconstitutional, and praying for an injunction against the sheriff, the railroad company and the county court of Mason, to prevent its collection from such of them as had not already paid it. The railroad company, by its president, answered the bill, maintaining the validity of the charter and of the proceedings under it, and the legality and constitutionality of the tax. And it having been agreed that the case should be finally disposed of upon the motion of the complainants for an injunction, the court, on the hearing, overruled that motion and dismissed the bill. From this decree the complainants have appealed to this court.

1. It is objected in the bill, and has been urged in argument, that the proceedings of the county court were not conformable to the prescriptions of the statutes which have been referred to, and were therefore unauthorised by them. But we perceive no material discrepancy, nor in fact any discrepancy at all in the performance of the acts required to be done in order to authorise the subscription, which, if valid and obligatory, imposed necessarily a debt of serious magnitude upon the county. The subscription itself, and the duties of the court preparatory to its being made, were ministerial acts,

prescribed particularly by the original statute, without leaving any discretion to the court. In providing for taking the vote, in ascertaining the result, and in making the subscription in obedience to it, the court followed the plain mandates of the statute. If that is authoritative, the subscription is valid and binding; and if the court, in any matter not affecting these preliminary steps, made orders in anticipation of the result, or in any manner exceeded their authority, such excess is simply void, and can have no effect upon the validity of the subscription, or upon the subsequent rights or powers of the court. The orders, therefore, by which before the subscription was voted for or made, the court laid down the form or mode in which the bonds should or ought to be executed or disposed of, are of no consequence. They effected nothing and authorised nothing. Even the orders with respect to the bonds made after the subscription, were, so far as they were unexecuted, unobligatory upon the court. And as the bonds for \$20,000, executed under the order of May, 1851, were afterwards cancelled, the whole subject of the bonds was at the August term completely in the power of the court, unaffected by the former orders, except so far as it then impliedly or expressly adopted them. And although no bonds had actually been executed when the tax for payment of the interest was levied at the May term, 1851, yet, as the subscription creating the debt had been made some months before, and the bonds might be required at any time, the tax was properly levied at the May term, if the court had power to levy it. If a majority of justices in commission was requisite for the purpose, there was a decided majority at that term. And in fact there seems to have been a majority on the bench at each of the previous terms at which orders were made in reference to taking the vote or making the subscription or issuing bonds. Nor do we suppose, that under the existing constitution and laws, the presence of the justices of the peace in the county, or of a majority of them, was requisite to authorise the court, at its August term, to prescribe the form and terms of the bonds, and the mode of execution and delivery. And even if it were conceded that this execution of bonds directly to the company, in payment of the subscription of stock, was not authorised by the original act of 1850, it was expressly authorised by the amendatory act of 1851. And there seems to have been a precise conformity with the original act in the mode of calling for and taking the sense of the voters on the question of subscribing the stock, which was done under the original act alone.

Whatever reasons there may be, in point of propriety and justice, for not taking the joint vote of Maysville and the rest of the county upon the question whether the whole county, including Maysville, should subscribe \$150,000 in the road, it is entirely clear, that while the statute authorises a separate vote of the citizens of Maysville for determining whether she would take \$150,000 of the stock, which she has done, it also authorised her to vote jointly with the rest of the county upon the question of the county subscription, of which she is to bear her proportional burthen, in addition to that which she had imposed upon herself. There was therefore no departure from the statute in this respect. So, however ungraceful and disrespectful it may have been to the county court, or to the people, that the call for the vote should have been made by the president and directors of a road company, this too was prescribed by the statute; which, although it might, and perhaps should, have required the vote to be taken at a general election, when a fuller expression of the popular will or judgment might have been expected, yet left it to the president and directors to determine the time.—It may be assumed too, that they fixed the day with a view to their own condition or necessities, and especially as it has not been shown that they did it for the purpose or with the effect of obtaining an unfair advantage. It might have been more discreet, too, for the legislature to have required the concurrence by vote of all the qualified voters of the county, to authorise the subscription. But if the election or vote was properly conducted, under valid legal authority, the presumption of law is, that those who did not actually vote concur, or at least acquiesce, in the decision of the majority of those who did vote. It does not appear that the op-

ponents of the road were less able to get to the polls than its friends, or that more of them staid away.

II. In approaching the question of the constitutional validity of the legislative acts under which this tax has been levied, we are met by the preliminary question made in argument, whether they are to be compared with the old constitution, or with the present one adopted on the 11th day of June, 1850. The general principles and provisions of the two instruments, so far as they bear upon this subject, are substantially the same. But the 36th section of the second article of the present constitution contains a prohibition with respect to the contracting of a public debt, which, it is contended, is violated in its spirit and substance, if not in its letter, by one or both of the acts now in question.

The section referred to is as follows, viz:—"No act of the General Assembly shall authorise any debt to be contracted on behalf of the commonwealth, except for the purposes mentioned in the 35th section of this article, unless provision be made therein to lay and collect an annual tax sufficient to pay the interest stipulated, and to discharge the debt within thirty years; nor shall such act take effect until it shall have been submitted to the people at a general election, and shall have received a majority of all the votes cast for and against it;" with a proviso that money may be borrowed to pay part of the public debt, without such submission or provision. It is argued with great force that this prohibition was founded on the fact that the State had incurred a large debt for internal improvements, under the delusive expectation that the works erected would reimburse the expenditure, and might produce a large annual revenue; and that this clause of the constitution was intended to protect against similar delusions in future, and the extravagances and disasters to which they would lead—not the commonwealth, as a mere ideal abstraction, unconnected with her citizens and her soil, but the commonwealth as composed of her people and their territorial organisations of towns, cities and counties, which make up the State; that it intended to furnish this protection by commanding that every legislative act which authorises the incurring of a public debt of the character described, shall contain the stern requisition of a tax which will extinguish the debt and interest in thirty years, so that the people to whom it is to be submitted at a general election, may and must see the full extent of the burthen they are called on to assume; and that although in terms the mandate applies only to such legislative acts as authorise a debt on behalf of the commonwealth as an entirety, it embraces in principle every legislative act which authorises a debt to be contracted by any of the local organisations of which the commonwealth is composed.

It is contended that the object of the constitution is not merely to guard the commonwealth from the name of a debt unnecessarily created, but to protect the property and citizens of the commonwealth from the burthen of such a debt contracted under legislative authority, unless sanctioned by the consent of a majority of those who are to bear it given at a general election and under circumstances which must apprise them of the consequences; and the burthen is the same to the citizen, whether imposed by a debt contracted on behalf of the whole State of which he is a citizen, or by a debt contracted on behalf of the local organisation of which he is a member; that there is at least equal necessity for guarding him from the imposition of such a burthen, by legislative authority and without his consent, in this last relation as in the first, and indeed that it is much greater, since the representative principle, which of itself affords a most valuable guaranty against the unnecessary imposition by the legislature of a burthen which is to fall upon the whole State, affords practically none, or none that is appreciable, against a legislative act authorising the imposition of a local burthen upon the local community; that all the dangers to be apprehended from the imposition of unnecessary and extravagant local burthens are immeasurably enhanced, if the legislature, following in part only the spirit of this clause of the constitution, may relieve itself from the responsibility of direct and peremptory action, by devolving upon the majority of the local community, acting merely as individuals and under no responsibility, the power of determining whether the burthen shall be imposed upon all, and

of thus, by their will, giving effect to the legislative act; and that if, in partial conformity with this clause, the minority of the local community is thus to be subjected to an extraordinary and onerous taxation by the will of the local majority, that minority, and every individual composing it, is entitled to the full application of the entire provision, as furnishing some check to the unwise and precipitate action of the majority itself, and as affording to the minority this single shadow of security against the oppressive abuse of irresponsible power.

It is therefore claimed that whatever protection this provision of the constitution intended to provide against the imposition by legislative authority of a general burthen upon the citizens of the whole State, the same protection must, according to the spirit and object of the provision, be extended to the citizens of each and every local community, to the majority of whose citizens, the power of imposing a local burthen is committed by legislative act; that the protection of the whole, implies necessarily the protection of all of its organised parts, and that the whole cannot be safe while all or any of its parts are exposed to danger; that it is in vain to say that the legislature shall not authorise a debt on behalf of the State, except under certain restrictions intended as a security against imprudence and extravagance, involving necessarily oppressive taxation, if it may authorise a debt on behalf of every county in the State, without regard to this restriction; that when every county shall under such authority become indebted, the whole State, not in its corporate capacity, but in its real and substantial body as composed of citizens and their local communities, will in substance and in fact be indebted, and that the power to involve a single county, and each in succession, in debt, being a power to involve every county, and therefore the whole State in debt, the restriction upon the power to authorise a debt on behalf of the State wholly fails of its purpose of protecting the State and its citizens from unnecessary and oppressive burthens, and becomes utterly vain and nugatory, unless it be applied to the power of authorising a debt on behalf of the local communities as well as on behalf of the whole State; that the facility with which a legislative act deferring to the majority of the local community the question of imposing a local debt may be obtained, the great number of such acts recently passed, the strong feeling already extensively manifested, and every day increasing, to extend this species of legislation to every county, any portion of whose citizens may expect advantage from its exercise, and the powerful motives and obvious opportunities which are necessarily offered for deluding, or at least misleading a portion of those who are to pass upon the question, evidence a rapid progress towards the involvement of a large portion if not the whole of the state in a debt more extensive, and in taxation more burthensome and oppressive than any which, even without this restriction, would probably be imposed by direct legislation upon the whole State, and certainly more so than could be expected to be sanctioned by a majority of the voters either of the whole State or of the several counties, under a certain prospect of immediate and continued taxation by which the debt should be discharged in thirty years: that this progress cannot be checked, nor its ruinous consequences avoided, unless the constitution can be interposed to protect the commonwealth and her citizens, and their property, against these species of legislation. And it is claimed that in order to protect the rights of the citizen from this power of local taxation, authorised by the legislature without actual responsibility, and exercised in fact by an irresponsible local majority, every provision and principle of the constitution which can reasonably be brought to bear upon the subject, should, instead of being strictly construed, be construed liberally, according to its true spirit, and for the effectuation of its real objects; that every citizen has a right to such a construction of the constitution under which he lives, and may demand such a construction from this court as the ultimate expounders of the constitution and the final arbiter and guardian of the rights which it secures; and that as the provision in question, if confined, according to its letter, to a debt to be contracted in the name of the State, would fail to effectuate its manifest and substantial objects, and would be subject to evasions which reduce it

to a mere shadow, this court is bound to give it a substantial operation by applying it to such legislative acts as authorise the creation of a debt to be contracted on behalf of the State itself. And it is urged in behalf of this construction, that if the legislature may, under the specious form of referring the question to a majority of the voters of a county, authorise a county debt for a work of internal improvement, as in this case, there is nothing to prevent the exercise of such a power for the promotion of every object which a majority of the county may be persuaded is advantageous to them, and the property of the minority may be thus subjected, without restriction or control, to the will and the interests of an irresponsible party.

We have thus stated this argument, and, indeed, in some respects, amplified it, because all of us consider it as entitled to the highest consideration in a case coming properly within the operation of the present constitution, and because some members of the court are of opinion that if the authority to create the debt and burthen now in question, had been derived from a legislative act passed since the adoption of the present constitution, the reasoning and conclusion of the argument would be irresistible in their application to such an act; not because they assume that the members of the convention who framed, or the majority of that body which adopted this particular provision, actually looked to such an application of it, which from its structure is not probable, but because they are of opinion that, in its spirit and principle it embraces every legislative act, authorizing a debt to be contracted by any of our local communities, and especially by counties which cover the whole territory and include all the inhabitants of the State; and because all of us perceiving that the power of local taxation is more likely to abuse, and more likely to be oppressively exercised than any other legitimate legislative power, we are therefore the more ready to apply to its reasonable restraint any clause of the constitution which by fair and rational construction may have that operation, and because the citizens who voted for the constitution may not only have regarded it as containing provisions and principles sufficient to secure their essential interests, but may have regarded this particular provision as protecting them against all legislation authorizing a public debt which might ultimately involve taxation for its payment unless sanctioned by a majority of those upon whom it was to be imposed at a general election, and with a full view of the burthen of taxation which was to accompany it. But a majority of the court is of opinion that this provision of the present constitution, if construed, as contended for in the argument which has been stated, does not apply to the 28th section of the act incorporating this railroad company, because the act was passed before the adoption of the constitution. And if the provision might under any circumstances, be applied to the creation, after the adoption of the constitution, of a debt authorized by a legislative act of prior date, it ought not to be so applied in a case in which there were vested rights under the previous law, which it could not be supposed the constitution intended to abrogate. And although it is not expressly shown, not having been denied, that in the case private subscriptions, without which the company could not have been organized, had been made on the faith of the charter and of the right to have the subscription of such counties as might choose to subscribe under the 28th section of the charter; yet as it seems probable that this was the case, and because it may have been the case, it should not in the absence of allegation and proof be assumed that it was not so, if the validity of the act, and of the authority conferred by it, were to be thereby subjected to a test which did not exist when it was enacted, and to be defeated because the act did not contain a provision not essential to its validity at its date. There is no such urgent reason for giving to the provision a construction which shall make it overreach and repeal acts previously passed, or invalidate rights acquired under them, as there may be for constructing it to apply to all future acts which come within its principle tho' not within its letter. And as the constitutional provision plainly refers to future and not to past legislation, and as the subscription for the county of Mason, which imposed the debt on the county, was

made under a prior law and in pursuance of it, the validity of the debt is not to be tested by the constitutional provision referred to, but by the principles and provisions of the former constitution, under which the act authorizing it was passed.

The amendatory act of February, 1851, though passed after the adoption of the new constitution, does not come within the provision which has been noticed, because the debt had already been created and was obligatory upon the county, if the first act was valid, and it was too late to put the question to the vote by a new law. Moreover the first act under which the debt was created, gave full power to the county court to provide for its payment either by taxation or by borrowing the money, which, of course, implied the power as it did the necessity of furnishing some evidence of indebtedness, and the court might doubtless have issued the bonds of the county in some form to the lender. If without the amendatory act, the court instead of borrowing the money upon those bonds in order to pay the subscription to the company, had with the consent of the company transferred them to it at once in payment, we do not perceive that the original power would have been thereby materially, if at all, departed from, or that the proceeding would have furnished any just ground of complaint to the citizens of the county, and much less ground of constitutional objection. It is difficult to see that the amendatory act confers any new substantive power, and its passage seems rather to have been necessary to authorize the company to receive the bonds in payment, than to authorize the court to make payment of the subscription in that way. It seems to us, that instead of being injured, the county and its citizens are obviously benefited by the arrangement, which enables them to pay off the county subscription at par in bonds payable in 30 years, leaving them in the meantime subject to the payment of the interest by such taxation as may be necessary; whereas, without such arrangement the county must have met the current calls upon the stock by heavy taxation, or the money must have been raised upon the bonds on whatever terms it could be done. In that case too any loss upon the bonds must have fallen upon the county, which must have made up the payment of the stock subscribed, whereas now the loss falls on the company alone, and the county and its citizens will only feel it as stockholders in the retardation of the work or in the ultimate profit to be derived from the stock, which, however, seems to be counted as nothing by the complainants. It is to be observed too, that if there is no guarantee against the sale of the bonds at a sacrifice by the company, neither was there any case of a sale by the court—that it cannot be assumed that the company having an actual interest to the whole extent of the bonds, will be more willing to sacrifice them unnecessarily than the county court would have been, and that the bonds will probably be more vendable with the endorsement of the company rendering liable all their means, than they would be of standing on the credit of the county alone. And whatever repugnance the complainants may feel to becoming stockholders in the corporation, we suppose the certificates for payment of the tax will not prove actually injurious, and they may at some time, if not now, command a value in the market, which will aid in making future payments, or in reimbursing those previously made. There is no complaint with respect to the slight difference between the original and amendatory act with regard to the stock acquired by tax payers, being or not being taken from that subscribed by the county. And upon the whole, we are satisfied that if the original act is valid, and the subscription of stock by the county court obligatory, no substantial objection can be made to the amendatory act. And being of opinion, that even if the 28th section of the original charter might have been deemed a violation of the 36th section of the present constitution, if it had been enacted since its adoption, it was not as a pre-existing law, abrogated by that instrument, we proceed to consider the question whether the 28th section of the charter violates the constitution existing at its date, either in the nature and extent of the power assumed or granted by it, or in the manner in which it was directed to be exercised.

III. It would be difficult, perhaps impossible, to define the extent of the legislative power of the State,

unless by saying that so far as it is not restricted by the higher law of the State and Federal constitutions, it may do every thing which can be effected by means of a law. It is the great supervising, controlling, creative and active power of the State. Subject to the fundamental restrictions just referred to, whatever legislative power the whole commonwealth has, is by the constitution vested in the legislative department, which, representing the popular majorities in the several local divisions of the State, and under no other restraint but such as is imposed by the fundamental law, by its own wisdom, and its own responsibilities, may regulate the conduct and command the resources of all, for the safety, convenience and happiness of all, to be promoted in such manner as its own discretion may determine. The legislative department performs and finishes its office by the mere enactment of a law. It does not of itself carry the law into operation.—This is necessarily done by extrinsic agencies.—The law being made known, may be universally observed and obeyed. It may be carried into operation by the exclusive alone. It may be enforced by the judiciary, or by the co-operation of the judiciary and the executive. These are the regular agencies provided by the constitution for the execution of the laws. But the legislature is not restricted to these agencies. It may select or appoint others, as is often done when the object of the law is to accomplish local or individual purposes. The agency generally employed for applying the legislative will and the power of the government to purposes merely local, has been that of county courts for counties and of the trustees of towns or the municipal authorities of cities for towns or cities, which, to the extent of the powers permanently or temporarily vested in them, and whether allowed a discretion or not, do but carry into effect the legislative will or power. But these local agencies are selected, and some of them created by the Legislature itself, for the purpose of carrying its power into all parts of the commonwealth, or into such parts as require its application for their benefit or coercion. And the legislature may select other agencies for particular purposes, having in view, as it must be presumed to have, the nature of the object to be accomplished and the fitness of the agency selected.

It is not essential to the character and force of a law, that the legislative enactment should itself command to be done every thing for which it provides. The legislative power to command a particular thing to be done, includes the power to authorize it to be done. The act done under authority conferred by the legislature, is precisely as legal and valid as if done in obedience for a legislative command. Each is entitled to the same force and efficacy, and each must be followed by all the consequences which either by the general laws or by the particular statute, are annexed to the particular act, because each if done in effectuation of the legislative will, and each, when done according to that will, has all the sanction which the legislative power can give. Each is therefore entitled to the aid of the whole power of the government to uphold it, and to maintain the rights flowing from it. A peremptory statute is at once mandatory, and requires obedience, and this is at once a perfect law in all respects. A statute giving authority and discretion to do or not to do; and prescribing the consequences of the act when done, has not, until the act is done, any mandatory effect, requiring immediate obedience, except so far as it regulates the time and manner of doing the act, and expressly or impliedly commands that the agent shall not be prevented from doing it according to the discretion allowed. Beyond this it has not a mandatory effect until the act is done, and therefore is not until then a perfect law, as to all the purposes provided for. In other words, it does not take its final effect as a mandatory law, until the discretionary act is done, upon which it is to have its final and peremptory operation. So far as such a statute confers authority and discretion, it is as obligatory from the first as the legislative power can make it; and although its further practical efficiency may depend upon the discretionary act of some other body or individual, it is not derived from that discretion, but from the will of the legislature, which authorized the act, and prescribed its consequences. The constitutional validity of a statute, whe-

ther peremptory or otherwise, does not depend upon the form of the enactment, nor, as we suppose, upon the particular agency to which authority is given, but altogether upon the nature of the act, authorized to be done, and upon the mode in which it is to be done, and upon the effect which the act itself, or the manner of doing it, and its prescribed consequences, may have upon the rights of individuals or corporations.

In enacting a statute which merely authorizes a particular thing to be done, in a particular manner, and prescribes the consequences, the legislature determines, peremptorily, the manner of doing the act, and its consequences when done. It determines conditionally, and upon such information as it possesses, that the act is in its nature proper and convenient, and the prescribed consequences such as ought to attend it. But, as there may be circumstances known to those concerned which would render the act and its consequences oppressive, or otherwise unacceptable, the legislature defers to them, or to their agents, or to such agency as it may select, the right of determining, in view of all the facts, whether the act shall not be done. Instances of legislation of this character, which as it is not altogether peremptory, may be called conditional, are too numerous in our legislative history, and as we suppose in that of every other government, to require or admit of particular enumeration.

The legislature of this state has habitually passed statutes, either requiring the county courts of all the counties, or of some designated county or counties, to do a particular act, as to levy a limited tax for a certain purpose, authorizing them to do it; and the validity of the statute has never been supposed to depend, in any degree, upon the question whether it was mandatory, or merely gave authority. The same may be said of the legislation with respect to the municipal corporations of towns and cities. With respect to private corporations, also, there may be and has been permissive legislation, to become peremptory upon acceptance of the statute by the corporation, or upon its performance of some act, as to which it has a discretion. And the same may be, and has been done, in cases of authority given to individuals by legislative act. It is no objection to the constitutional validity of such statutes, that they depend for their final effect upon the discretionary acts of individuals or others. The legislative power is not exercised in doing the act, but in authorizing it, and in prescribing its effect and consequences. The case of an ordinary act incorporating a private company fully exemplifies these positions. The legislature determines that a corporation for the accomplishment of a particular object, or the performance of particular operations or business, would be beneficial or expedient. It provides for the manner in which such a corporation may be brought into existence, prescribes the terms on which there may be a corporation, its mode of organization, and its rights, powers and duties when organized. But whether the corporation shall ever actually exist, and whether the statute, so far as it prescribes its rights, powers and duties, shall have any practical operation according to its terms, depend wholly upon voluntary acts of individuals in subscribing stock, or performing such other acts as may be necessary to bring the corporation into existence. And yet, when the requisite acts are done, the statute is absolutely obligatory, not only upon those who have complied with its terms and thus formed the corporation, but upon all others. And it is even more obligatory upon the legislature than ordinary statutes, because when subscriptions are made under it, or other requisites performed, whereby it becomes a corporation, the charter becomes a contract, the obligations of which the legislature cannot impair. Then a statute is not the less a law, emanating from the legislative power, and clothed with all the sanction which legislative authority can give, because its final effect or efficiency may depend upon the discretionary act of an individual or individuals. And so far as the legislative power extends to the imposition of local burthens, we do not perceive that the mere form in which it is executed in the particular case, as being peremptory, or in part permissive only, can affect the validity of the statute, unless the legislative power be in fact exceeded, or the rights of individuals be violated in its exercise.

That the legislative power of the commonwealth

is competent to the imposition of local burthens or taxation, for the accomplishment of local purposes, has not been and cannot now be denied. There is and must be a power in the state competent to coerce the contribution of local means to objects of local necessity and convenience, or the local community must do without them, or must depend upon individuals for them, or they must be provided for by the general resources of the whole state. The power to coerce local contributions for such objects, being established by general usage, and by the apparent justice and propriety of the thing, and being deducible from the general powers and duties of the government, it belongs primarily to the commonwealth, as a legislative power inherent in it, and which cannot be exercised by any portion of the people, whether in an organized or unorganized form, without the consent of all who are to be subjected to it, except so far as such portion of the people may be authorized by the legislative power of the commonwealth to act upon the subject with obligatory effect. The majority of the local community having no inherent right to blind the minority with respect to those local impositions, can communicate no power on the subject to the legislature. But the legislative power might in any particular case be invoked and actually exerted upon the statement of the representatives from the particular county, or upon the petition of any number of the citizens of the county, an enactment peremptorily ordering the contribution or tax, and providing for its application, would not depend for its constitutional validity upon the question whether it had been passed upon the petition of a majority, or of less than a majority of the citizens to be affected by it, or without a petition from any, and upon the statements and solicitation of the county representative, or merely upon the general knowledge and judgment of the legislature. It is indeed scarcely to be apprehended that the legislature, unless in some case of most obvious necessity and propriety, would ever upon its own mere will and judgment, against the consent of the local representative, and without petition from the community to be affected, impose an onerous tax for new and extraordinary purposes. When the object to be accomplished by a local tax is one of mere convenience, or which, though obviously promotive of the general advantage and prosperity of the local public, is not one of absolute necessity or of pressing importance, there is an obvious fitness in providing, before the legislative act should become imperative and the imposition be irrevocable, some means by which the general judgment of the legislature as to its importance and as to the propriety of accomplishing it by a local tax, should be confirmed by that of the local community which is to receive the advantage and to bear the burthen. But if the legislative power be competent of itself to impose the local burthen, such reference to the local will or judgment, though a fit measure of precaution in point of expediency and discretion, cannot be essential to the constitutional validity of the legislative act by which it is done. And therefore, it can be no valid objection to an act making such reference, that it has not adopted the very best means of ascertaining the will and judgment of those who are interested in the subject.

If because, in such a case the final efficacy of the legislative act, and the actual levy of the tax, depend upon the result of this local reference, it may be said that the tax is in fact levied by those who make the decision in favor of it, and that in this instance it should have been determined by a majority of all the qualified voters, and not merely by a majority of those who voted; it is answered that when the question is submitted to the majority of those who vote, and full opportunity of voting upon it is given to all, it is in fact submitted to all, and if the reference be otherwise valid, the decision of a majority of those who vote in the decision of a majority of all who are entitled to vote. This is the governing principle in all popular elections, under both the old and the new constitutions, and would govern this question in the case, even if the 36th section of the new constitution were applicable to it. And although that section requires that the vote to which it refers shall be taken at a general election, there is nothing in the former constitution which can be construed as making a similar requisition. We have already said that it is not

shown that there was any unfairness in taking the vote, or any advantage sought or obtained in fixing the time for it. The length of time for which notices were required and given and their publicity, the small size of the county of Mason, the density of its population, the number of its towns and roads, and the convenience of voting afforded by its precincts, leave no room to doubt, and especially in the absence of all evidence to the contrary, that full opportunity was intended to be given, and was in fact given to every voter to know of the time of the election, and to go to it if he chose. The fact that there was a large opposition to the tax, on the ground that it was oppressive and unconstitutional, strengthens the presumption that all were apprised of the intended vote, who felt or could be made to feel any interest in it, and that all voted who desired to do so. We may add that the new constitution itself, in providing for its own adoption or rejection by the people, did not require either that the vote should be taken at the time of the usual elections, or that a majority of all the qualified voters in the state must vote for it in order to secure its adoption. But it assumed, as we do in this case, that the majority of the actual voters expressed the will of the majority of all entitled to vote, and was therefore sufficient to determine the question for the entire state.

The considerations which have been mentioned, bear also upon the objection that the call for the vote was made by the president and directors of the railroad company, and the day fixed and the notices advertised by them, and not by the county court, or some other body or officer, whose duty it was to guard the interests of the county. We remark further, that the notices, being authorized by the statute and advertised as directed, must have been as effectual for the purpose of diffusing a knowledge of the time and subject of the vote, and of its consequences, as it made by the clerk or court of the county; that it was not the intention of the legislature to subject the county of Mason to the burthen proposed, or to authorize the majority of the voters to subject it, unless it should be necessary for the construction of the road; of which the officers of the company would be the best judges; and that there is no substantial difference between requiring the county court to fix and advertise the time of the vote upon application of the company, and authorizing the company to do it themselves, unless it may be in regard to fixing the time, and that it is not shown that any injury accrued to the complainants, or to any others, by allowing the company to fix the time, or by the time being fixed as it actually was. It may be that the vote would have been larger than it was, if it had been taken in May or August. But we cannot assume that the result would have been different or more satisfactory to the complainants. And we do not understand that any of those who did not vote, complain that they had no opportunity of voting. With regard to the mode in which this contribution is to be made, viz: by the subscription of stock in a private corporation, the question of legislative power and of the validity of such subscription, and of the tax levied for its payment, are settled by numerous legislative precedents under which many counties have, through their county courts, subscribed and paid for stock in turnpike companies making roads through their counties, and which were sanctioned directly by the opinions of this court in the case of the Justices of Clarke county against the Paris and Winchester Turnpike Road Company—14 B. Mon. 143—and substantially in the case of Talbot against Deat—9 B. Mon. 526; which last case also meets the objection that the complainants are made stockholders individually against their will. If the legislature could direct or authorize a coercive contribution from the county of Mason for making the railroad which runs from Maysville to the opposite limits of the county and thence to Lexington, there must of necessity be agents to receive and disburse the money, lay out the road, make contracts for its construction, and superintend the work. And the principle of this feature of the act, and of the precedents of a similar character, is, that the legislature adopts for this purpose the agency of a corporation created by itself for the very purpose of making the road, under such guards as were deemed necessary for the safety of its funds and the due execution of the work,

and which, by having invested its own funds in it, has an interest as well as a duty which entitles it to a reasonable degree of confidence. Though the corporation is technically a private one, the work in which it is engaged may be one of public utility and importance. It is upon this ground that turnpike and railroad companies are authorized to take, upon making compensation, the land of individuals for the use of the road, as for a public use. And we do not doubt that the legislature may use their instrumentality for the application of such local contributions as may be properly coerced for the construction of the works in which they are engaged. And although there is no express provision in the original or amended charter requiring the \$150,000 subscribed by the county of Mason be expended within her limits, it appears that it is not nearly enough to complete the road to that extent and there is a sufficient guaranty in the interest and influence of Maysville, which seems to be the principal seat of the company, and in the interest of the company itself, that a sum more than equal to the county subscription will be expended within the county. If it be essential that the same, or an equal sum, be there expended, it cannot be essential that it be the identical money drawn from the people of Mason.

Whether this road is an object of such a character as that the legislature may constitutionally require a tax or contribution in aid of its construction from the counties through which it passes, or from the county of Mason, at whose county seat it commences, is a question on which, as on every question involving the exercise of the taxing power, undoubtedly belonging to the legislature, and scarcely capable of definite limitation, a judicial tribunal must, as this ever has done on similar questions, feel great embarrassment. It is essentially a question of fact and opinion referring itself, in a peculiar manner, to the discretion and judgment of the legislative department, to which alone the power of taxation belongs, and by whose will alone its coercive exercise can be authorized. We avow, as this court has heretofore done, that we regard the power of local taxation, and especially when exercised or controlled by the local majority, as one eminently subject to abuses, involving injustice and oppression. But now, as heretofore, we find no clause or principle in the constitution which can be brought to bear directly in restraint of this power, but that which declares that no man's property shall be taken for public use without his consent, unless just compensation be first made. This principle of the constitution may be violated under the pretence of levying a tax, and under color of the taxing power. But it is not every inequality which may occur in the operation of a tax apparently equal, nor every difference of opinion upon the question, whether a particular tax should be local or general, or whether it has been confined to too small, or extended over too large a portion of people and territory, or whether the object to be accomplished by the tax, is one of local or general importance, or whether the tax will fall upon individuals in the proportion in which they are actually interested in its object; it is not every difference, nor where there can be an honest diversity, is it any mere difference of opinion upon these points, that will justify the interposition of the judiciary to arrest the operation of a legislative tax on the ground of this principle of the constitution. If it would, the discretion and substantial power of taxation, properly inherent in the legislature, would, in effect, be transferred to the judicial department; or be so subject to its control as to change the character of the power itself, and defeat the ends for which it was invested in the representatives of the people. Perfect equality of taxation is unattainable, and could not be secured even if the judiciary were to take part in framing the laws which impose it; and the other points above referred to are so emphatically and exclusively the subjects of legislative judgment and discretion, that when it may be assumed that these have been fairly or actually exercised in the imposition of a tax, there can scarcely be a possible ground for judicial interposition.

For a fuller statement and illustration of our views upon this subject of local taxation, and of the application to it of the constitutional principle which has been stated, that can be made in this

opinion, already greatly protracted, we refer to the case of *Cheaney vs. Hooser*, 9 B. Mon. 330, and especially to that part of the opinion extending from page 341 to page 346 in that opinion, the court, referring to the wide range of legislative judgment and discretion on the whole subject, say, that with respect to the objects for which the tax, local or general, may be enforced, it would seem to be conclusive, p. 344. And on page 315, it is said that the limit imposed by this clause of the constitution "can only consist in the discrimination to be made between what may with reasonable plausibility be called a tax, and for which it may be assumed that the objects of taxation are regarded by the Legislature as forming a just compensation, and that which is palpably not a tax, but is under the form of a tax, or in some other form, the taking of private property for the use of the public, or of others, without compensation." That "there must be a palpable and flagrant departure from equality in the burthen, as imposed upon the persons or property bound to contribute, or it must be apparent that persons or their property are subjected to a local burthen for the benefit of others, or for purposes in which they have no interest, and to which they are therefore not justly bound to contribute;" and that "the case must be one in which the operation of the power will, at first blush, be pronounced to be the taking of private property without compensation and in which it is apparent that the burthen is imposed without any view to the interest of the individual in the object to be accomplished by it."

These positions rest upon the assumption that the Legislature, in imposing or authorizing local taxation, exercises its own judgment and discretion, and expresses its own will under its own proper responsibilities, and, resting upon that basis, we are still of opinion that they should not be departed from; indeed, that they may be said to have been sanctioned by the convention which framed the new constitution, if not by that instrument itself, since, although they were announced before that body met, or was elected, and under an avowal of the dangerous tendency of the power of local taxation, the new constitution contains no new restriction upon it unless it be contained in the 36th section of the 2d article, to which reference has already been made.

But other principles of the constitution are involved, and especially the great principle upon which the whole fabric of our government and laws is based. That our government is a regularly organized representative republic, of which every department has its own proper functions which it is bound to perform upon its own proper responsibility; that the great security which the people, and especially the minority, have against the oppressive abuse of power, consists in the regular action of each department in its own sphere, and under its own appropriate responsibilities; that under this constitution and frame of government, a majority of the whole people cannot act upon a single individual, but through the regular organs appointed for the exercise of the governmental power that a majority even of the whole, and consequently more certainly a majority of any of its organized parts, have no power, except through a legislative enactment, to impose a tax or any burthen upon the minority or any individual without their consent; that every individual in the State has a right to look to this principle, and to the regular action of the government for the protection and security of his rights; and it is contended that in the act in question, in referring the imposition of the tax to the will of a majority of the county, the legislature has violated this principle, has surrendered its own discretion and judgment, and thrown off or evaded its own responsibility, and has invaded and destroyed the rights of individuals and of the local minority, by subjecting them to the will of a local majority, acting under no responsibility but such as their own interest may impose; and that the obvious and necessary tendency of such legislation is to change and pervert the whole character of our government, to destroy its unity, to overthrow its guaranties and barriers against oppression, to erect the several counties into absolute and unrestricted democracies, and thus to subject the citizens to an arbitrary power unknown to the constitution, at war with its principles, and utterly destructive of the rights which it intended to secure.

We admit the general correctness of the principles thus stated as applicable to the assumed character and spirit of this legislative act, and none can deprecate more than we do the character and consequences of such legislation. But were it admitted that in case of such reckless legislation as is supposed; this court could apply the corrective to a wanton disregard of duty and responsibility, and thus check an evil the permanent existence of which to any great extent in the representative body would demonstrate a fatal degeneracy in the constituency by which it is chosen, still we could not assume upon the face of this statute that the legislature did not exercise its own discretion and judgment under a proper sense of responsibility, and that it did not determine for itself, and upon due deliberation, so far as such determination was necessary to justify the authority given by the act, both as to the character and importance of the road, as justifying the local burthen imposed, and as to the just extent to which the burthen might be imposed. And under the principles settled in the cases above referred to, and adopted in this opinion, we cannot say that there is such a flagrant abuse of legislative discretion on these questions, or such a flagrant departure from equality or justice, as would authorize the court on these grounds to pronounce the act unconstitutional. The reference of the question as to the execution of the authority given and the consequent imposition of the tax to the popular majority of the county, may have been, and as we should in reference to the Legislature assume, in fact was resorted to as a means of ascertaining, with great certainty, and in a more satisfactory manner, the expediency in point of time and circumstances of giving final effect to the legislative act, and although such legislation may be resorted to as a means of evading the responsibility of direct and peremptory action, and of surrendering, or avoiding any exercise of the legislative judgment and discretion with respect to the objects to be accomplished and the manner of accomplishing them, we are not authorized to assume it, that it was so in this case, as the ground of judicial action. Nor do we perceive that there is any greater abandonment of the legislative will and discretion necessarily to be implied in referring this question as to the execution of the authority and the final imposition of the tax to the majority of those who are to bear it, than in referring it to the county court or the trustees or council of a town or city. In the case of the justices of Clark county *supra* the objection was that the authority to impose the tax was given to a body which was not elected and did not represent the people of the county. In this case it is contended that the reference should have been made to the county court, and that the discretion as to the execution of the law should have been confided to that body. And it is contended that this case is materially different from that, and also from the case of *Talbot v. Dent*, in which the charter of the Louisville and Frankfort railroad and the authority therein conferred to levy a tax, came in question in the fact that in each of those cases a discretion was vested in the regularly constituted local authorities to execute or not to execute the law. To this we answer in the first place, that it was by virtue of legislative enactments that these local tribunals had any authority on the subject, and the question to what body such authority may best be committed is primarily and chiefly a legislative question. And in the second place, that although in the charter of the Louisville and Frankfort railroad, there is an apparent discretion in the council of Louisville, to submit or not to submit the question of the subscription, and consequent tax, to the voters of the city, yet as the city council was in fact a body annually elected by the same voters, and must in a short time have been coerced into an exercise of discretion comfortable to the will of their constituents, there is scarcely a shade of distinction between that case and this, on the ground of the discretion vested in the city council. And further, we may again refer to the 36th section of the 2d article of the present constitution, as sanctioning the principle that the effect of a law imposing a public debt and consequent taxation may be referred to the qualified voters who are to bear the burthen, without violating the principles of the government, and it is to be remarked that it does not secure those who may be opposed

to the imposition either from the votes of those who have greater or less interest in the object to be accomplished than themselves, or of those who having no property may be supposed to have no interest in the question of taxation; nor does it secure any from the delusive expectation that the profits of the proposed undertaking will soon equal or exceed the tax, or make the burthen insignificant in comparison with the advantage to be expected in the enhancement of their property and business.

In addition to this, there are numerous examples of legislative acts, by which the power of determining upon local taxation has been communicated substantially to portions of the local community, to be exercised by a certain majority of those who are interested, and to become compulsory upon others. We refer to the cases in which a certain portion of the owners of lots in any square are authorized, through the agency of the town or city authorities, to have the adjacent streets or sidewalks graded and paved, which has been sanctioned by this court. The powers originally given to the inhabitants of school districts to vote a tax, is another example; to which we might add, though bearing more remotely on the subject, the various acts which have referred to the popular vote questions as to the boundary or creation of counties, and the removal of seats of justice, involving more or less directly a increase or diminution of taxation. The objection, that the city of Maysville having a peculiar interest in the subject, and a controlling influence by the magnitude of her vote in the determination of the question submitted, ought not to have been united with the rest of the county in submitting the question of the county subscription, is, as we think, covered and met, so far as it is intended to be a constitutional objection, by the views already taken in this opinion. And although in this and some other respects we greatly doubt the propriety and justice of the act in question, and of the proceedings which it authorizes, yet in view of the precedents to which we have referred, of the indefinite character of the taxing power, of the right legislature to change and regulate the local organizations of which the State is composed and to judge of and provide for their local interests and necessities; and in view of the respect necessarily due to the legislative department, forbidding the assumption that it has acted without a proper consideration of its own duties and responsibilities, we are not prepared to decide that this act is unconstitutional.

Decree of the lower court sustaining the subscription affirmed.

For Slack, etc.—Ben Hardin, T. F. Marshall, J. W. Menzies, and Harrison Taylor.

For the company—Geo. Robertson, James Harlan, Henry Waller, F. T. Hord, and T. Y. Payne.

Greenville and Miami Railway.

We have, says the Cincinnati Gazette, the brief and plain report of Mr. Taylor, president of the Greenville and Miami railway company.

But for the delay in the receipt of the iron as soon as expected the road would, ere this, have been completed. It has been for some time ready for the superstructure. A sufficient amount of heavy T rail, to lay the track from Dayton to Greenville, is now in Sandusky and Dayton, weighing 56 lbs to the yard, of superior quality, the rails mostly 21 feet long, and beveled to avoid the necessity of cutting away the ties to give the rail a proper bearing. The track will be laid as fast as possible.

Three locomotives were contracted for, one to be delivered in August, and the other two in October last. One of these was a small one, for use in construction. This was received in August, and has been used, but is found of insufficient capacity to answer a good purpose, and its place will be supplied from Cincinnati, in a short time. Unfortunately the two large ones have been lost on Lake Erie on their way out. These cost \$7,250 each, and were insured for \$7,500 each, which will cover loss and charges. These funds will be employed in replacing the engines.

Contracts have been made for the necessary passenger and other cars at Dayton, and they will be in readiness as soon as the track is laid. As will the water and other stations and freight houses.—The road will be completed as soon as De Graff

can lay down the rail—11 miles from Dayton west, being already down. The line will now be very soon completed and in operation.

American Railroad Journal.

Saturday, February 14, 1852.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,
Signed, KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

J. F. WINSLOW, Esq., of Troy, proprietor of the compound rail for railroads, sailed for England on the 7th inst., for the purpose of making arrangements for the manufacture of the rail in that country, both for its introduction into the U. S. and for the purpose of bringing it into notice in Europe. The form of the rail is regarded with great favor by engineers and railroad men, and is fast coming into use; hence the necessity of more perfect arrangements for its rapid manufacture.

While in England, we take it for granted, that Mr. Winslow will call the attention of capitalists to our railroad projects and securities, with which, no man is better acquainted, nor better fitted, to place them before the public in their true light. In this country, Mr. Winslow stands deservedly high as an active, energetic, and successful business man. He has a thorough acquaintance with all our great interests, particularly with those connected with our railroads, and we commend him to our friends across the water who are seeking information in reference to our projects, and to the value of the various securities which we are putting forth to carry our works forward. We need the right kind of a man in England for this purpose, and we shall have one there in Mr. Winslow, so long as he shall remain.

Alabama.

Alabama and Tennessee Railroad.—A bill has been introduced into the Legislature of Alabama to authorize the State to guarantee the bonds of that company to the amount of \$750,000.

Tennessee.

The Legislature of Tennessee has appropriated \$300,000 to the East Tennessee and Virginia railroad, for the construction of bridges on the line of the road.

Georgia.

Superintendent of State.—It affords us pleasure to state that Gov. Cobb has tended the appointment of Chief Engineer, on the State railroad, to Wm. M. Wadley, Esq., late superintendent of the Central road, and the appointment has been accepted. Gen. John W. A. Sandford, we learn, has been appointed to the office of Treasurer, and William Rutherford, Auditor. The appointment for the important and responsible office of Chief Engineer, is one which, we doubt not, will give universal satisfaction. The Georgia Telegraph, speaking of this selection, says:

"There are few men in the State who could bring to the performance of the arduous duties connected with this appointment, a greater amount of practical ability, a more energetic and determined character, or a more single-minded devotion to the interest of the great work entrusted to his management, than Mr. Wadley. Under his administration of the affairs of this road, we predict a speedy change in its condition, and while we congratulate him upon his appointment, we also congratulate the Governor, and the State, upon getting the services of so valuable an officer."

Indiana.

Northern Indiana Railroad.—This road is now open to Laporte, thirteen miles from Michigan city, and forming, with the Michigan Southern railroad Co., a continuous line from Lake Erie of 190 miles. Next month the road will be completed from Michigan city to Chicago, leaving only the link between Laporte and Michigan city unfinished, on which the plank road will be used until March next, when it is expected the whole work will be completed.

Indiana Central Railroad.—An election of new officers of the company took place on the 14th ult., resulting in the choice of the following gentlemen:—

John S. Newman, Esq., President; John M. Commons, Secretary; John Crum, Treasurer; H. C. Moore, Engineer; and J. R. Mendenhall, of Richmond, J. S. Newman, Norris Jones, and David Commons, of Centerville, Thos. Tyner, W. Petty and S. Meredith, of Cambridge, Wm. Butler of Dublin, J. T. White, of Raysville, J. P. Foley, of Charlottesville, N. Crawford, and J. B. Sandusky, of Greenfield, and Wm. Sullivan, of Indianapolis, directors.

Lowmoor Iron.

We desire to call the attention of our readers to the advertisement of W. B. Lang in this week's paper. The Lowmoor iron is particularly adapted to the manufacture of locomotive tires, fire boxes, boiler plates, and rivets; and for these purposes we believe it stands without a rival. Tires have generally been made of two or three bars welded together; but by experience, that process of making tires has proved most objectionable. Bars being forged at different heats, cannot be of equal hardness, and tires made from two or three different bars, are harder in some parts than in others, causing an inequality in the wear, besides great liability to break in the welding parts. To prevent this difficulty, the Lowmoor Iron Company have lately, at great expense, erected large works for binding, welding and blocking tires from one single bar; and they are prepared to furnish tires in that improved style at as low a cost as consumers have before been compelled to pay for those made from short pieces of iron. A friend who has lately visited the Lowmoor works, informs us that he has seen two men forge the short bars, while it has required ten men to forge a bar sufficiently long for the one-weld tires.

India Rubber Car Springs.

We would call the attention of railroad companies and car manufacturers, to the advertisement of the New England Car Spring company, which contains the decision of the American Institute, awarding to F. M. Ray, Esq., a diploma for the best India Rubber Car Spring exhibited at the late fair of the Institute at Castle Garden. It will be seen that Mr. Ray's Spring has not only taken the prize at the fair, but what is of still greater importance, it has stood a much more severe test, the intense cold weather of the present winter, with triumphant success. As far as we have been able to learn there has not been a single instance where it has failed. It is an easy matter to make a Spring that will show well before the Institute at a period of the year most favorable to its actions; but it is a most difficult task to cure them in such a manner that shall secure perfect elasticity with the thermometer below zero. All the Springs of the Car Spring company are manufactured under Mr. Ray's own supervision, and we can assure the public that the company has acquired too valuable a reputation for making a good Spring, to afford to lose it by manufacturing an inferior article.

Massachusetts.

Stony Brook Railroad.—The following are the officers of this company:—Tappan Wentworth, President; John Wright, Sewall G. Mack, William A. Burke, of Lowell, Ziba Gay, of Nashua, J. W. P. Abbott, of Westford, and Samuel Lawrence, of Boston, the last in the place of John Clark, Esq., deceased.

Stock and Money Market.

Money has not been so easy in Wall street the present, as during the past week. The receipts of Gold have been light, while the shipments by the two last steamers have been equal to about \$2,000,000. This export, in connection with the extraordinary efforts among speculators, to carry up the price of stocks, has caused an unusual fluctuation among the fancies. The tendency with these is downward; but still the market cannot be said to have any settled character as far as they are concerned.

In well known securities there is a good deal doing on foreign account. We see nothing to change our opinion expressed last week that there will be a fair demand for securities of new works. From the amount offering, prices must rule low.—We believe that on the whole the prospect for the future is encouraging, and that our roads will be able to make good progress the present year.

The following statements are copied from an official document from the Treasury department which was laid before Congress on Wednesday.

At the Mint in Philadelphia.

GOLD.		
	Number of pieces.	Value.
Double Eagles.....	2,087,155	\$41,743,100
Eagles.....	176,328	1,763,280
Half Eagles.....	377,505	1,887,525
Quarter Eagles.....	1,372,748	3,431,870
Dollars.....	3,317,671	3,317,571
Total in Gold.....	7,331,407	\$52,143,446
SILVER.		
Dollars.....	1,300	\$1,300
Half Dollars.....	200,750	100,375
Quarter Dollars.....	160,000	40,000
Dimes.....	1,026,500	102,650
Half Dimes.....	781,000	39,050
Three Cent Pieces.....	5,447,400	163,422
Total in silver.....	7,616,950	\$446,797

COPPER.		
Cents.....	9,889,707	\$98,897 07
Half Cents.....	147,672	738 36
Total in copper.....	10,037,379	\$99,635 43

RECAPITULATION.		
Gold.....	7,331,407	\$52,143,446 00
Silver.....	7,616,950	416,797 00
Copper.....	10,037,379	99,635 43
Total.....	24,985,736	\$52,659,878 43

At the Branch Mint at New Orleans.

GOLD.		
	No. of pieces.	Value.
Double Eagles.....	315,000	\$6,300,000
Eagles.....	263,000	2,630,000
Half Eagles.....	41,000	205,000
Quarter Eagles.....	148,000	370,000
Dollars.....	290,000	290,000

Total in Gold.....	1,057,030	\$9,795,000
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SILVER.		
Half Dollars.....	402,000	\$201,000
Quarter Dollars.....	88,000	22,000
Dimes.....	400,000	40,000
Half Dimes.....	860,000	43,000
Three Cent Pieces.....	720,000	21,600

Total in silver.....	2,470,000	\$327,500
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RECAPITULATION.		
Gold.....	1,059,000	\$9,795,000
Silver.....	2,470,000	327,600
	3,529,000	\$10,122,600

At the Branch Mint at Charlotte, North Carolina.

	No. of pieces.	Value.
Half Eagles.....	49,176	\$245,880 00
Quarter Eagles.....	14,923	37,307 50
Dollars.....	41,267	41,267 00

Total in Gold.....	105,366	\$324,454 50
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At the Branch Mint at Dahlonega, Georgia.

	No. of pieces.	Value.
Half Eagles.....	62,710	\$313,550
Quarter Eagles.....	11,264	28,160
Dollars.....	9,882	9,882

Total Gold.....	83,856	\$351,592
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General Recapitulation.

	No. of pieces.	Value.
Philadelphia.....	24,985,736	\$52,689,878 43
New Orleans.....	3,529,000	10,122,600 00
Charlotte, N. Carolina.....	105,366	324,454 50
Dahlonega, Georgia.....	83,856	351,592 00
Total.....	28,703,958	\$63,488,524 93

The expense of coinage at Philadelphia is forty-two hundredths per cent.; at New Orleans one and eight hundredths per cent.; at Charlotte three and fifty-five hundredths per cent.; and at Dahlonega three and thirteen-hundredths per cent.

The Boston Post publishes a table of the monthly fluctuations in the railroad bonds and shares of New England, and in which New England holds an important interest. We give the extreme figures of January, 1851 and January, '52.

Railroad bonds.	Jan. 1st. 1851.	Jan. 1st. 1852.	Interest.
Cheshire, 1852.....	94	93½	2 3
Cheshire, 1854.....	93½	90	3 3
Cheshire, 1860.....	90	86	3 3
Michigan Central, 1860.....	105½	104	4 4
Norfolk county.....	64	56½	0 0
Ogdensburg 7's.....	98½	92½	3½ 3½
Old Colony.....	98	97½	3 3
Rutland, 1853.....	89	85	3 3
Vermont Central, 1852.....	94½	93½	3 4
Vermont Central, 1855.....	92	81	3 3
Vermont and Mass.....	89	82½	3 3
Reading, 1860.....	82	77½	3 3
Reading, 1870.....	78½	72½	3 3
Sullivan mortgage.....	80	72	2 3

Railroads.	Par.	Jan. 1. 1851.	Jan. 1. 1852.	Div'ds. Ju'e Dec. 1851.
Boston, Concord and Montreal.....	100	41	35½	— 3
Boston and Lowell.....	500	563½	530	4 4
Boston and Maine.....	100	103½	102	3½ 3½
Boston & Providence.....	100	84	84	3 3
Boston & Worcester.....	100	101½	98	3½ 3½
Connecticut River.....	100	81	60	0 3
Eastern.....	100	100½	95½	4 4
Fall River.....	100	92	98½	3 4½
Fitchburg.....	100	108½	103½	4 3
Michigan Central.....	100	96	95½	0 14
Nashua and Lowell.....	100	107½	104	5 4
New Bedford and Taunton.....	100	110	114	4 4
Norfolk county.....	100	45	13½	0 0
Northern.....	100	74½	64½	2 2½
Norwich and Worcester.....	100	66½	52½	1½ 2½
Ogdensburg.....	50	39½	26½	0 0
Old Colony.....	100	66	64	2 0
Passumpsic.....	100	84	63	3 0
Philadelphia, Wilmington and Balt.....	50	31½	29½	2 1½
Reading.....	50	37½	29½	0 3½
Rochester and Syracuse.....	100	115	112	5 5
Rutland.....	100	50	35½	0 0
Taunton branch.....	100	106	109	4 4
Vermont Central, (average).....	50	37½	25½	0 0
Vermont & Canada.....	100	105	98½	4 4
Vermont and Massachusetts.....	100	30½	24½	0 0
Western.....	100	702½	99½	4 4
Worcester & Nashua.....	100	51½	51	2½ 2½

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE AMERICAN RAILROAD JOURNAL.

NEW YORK FEBRUARY 14, 1852.

GOVERNMENT AND STATE SECURITIES.		
U. S. 5's, 1853.....	101	101
U. S. 6's, 1856.....	106	106
U. S. 6's, 1862.....	111½	111½
U. S. 6's, 1862—coupon.....	112½	112½
U. S. 6's, 1867.....	116½	116½
U. S. 6's, 1868.....	116½	116½
U. S. 6's, 1868—coupon.....	121	121
Indiana 5's.....	85½	85½
Alabama 5's.....	91a92	91a92
Alabama 2½.....	43	43
Alabama 6's—Canal loan.....	—	—
Alabama 5's—Canal preferred.....	41	41
Illinois 6's, 1847.....	68	68
Illinois 6's—interest.....	42	42
Kentucky 6's, 1871.....	107	107
Massachusetts sterling 5's.....	105	105
Massachusetts 5's, 1859.....	98	98
Maine 6's, 1855.....	103	103
Maryland 6's.....	102½	102½
Michigan.....	—	—
Mississippi.....	—	—
New York 6's, 1854-5.....	103	103
New York 6's, 18 0-61-62.....	110	110
New York 6's, 1864-65.....	115	115
New York 6's, ½ y., 1866.....	—	—
New York 5½'s, 1860-61.....	—	—
New York 5½'s, 1865.....	106	106
New York 5's, 1854-55.....	—	—
New York 5's, 1858-60-62.....	100½	100½
New York 5's, 1866.....	—	—
New York 4½'s, 1858-59-64.....	97	97
Canal certificates, 6's, 1861.....	104	104
Ohio 6's, 1856.....	105	105
Ohio 6's, 1860.....	108½	108½
Ohio 6's, 1870.....	115	115
Ohio 6's, 1875.....	115	115
Ohio 5's, 1865.....	104½	104½
Ohio 7's, 1851.....	100	100
Pennsylvania 5's.....	89	89
Pennsylvania 6's, 1847-53.....	—	—
Pennsylvania 6's, 1879.....	—	—
Tennessee 5's.....	—	—
Tennessee 6's, 1880.....	100	100
Virginia 6's, 1886.....	106	106

CITY SECURITIES—BONDS.

Brooklyn 6's.....	—
Albany 6's, 1871-1881.....	106½
Cincinnati 6's.....	106½
St. Louis.....	93½
Louisville 6's 1880.....	93½
Pittsburg 6's, 1869-1871.....	95
New York 7's, 1857.....	107
New York 5's, 1858-60.....	101
New York 5's, 1870-75.....	102
New York 5's, 1890.....	102½
Fire loan 5's, 1886.....	101½
Philadelphia 6's, 1876-90.....	100½
Baltimore 1870-90.....	104
Boston 5's.....	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868.....	109
Erie 2d mortgage, 7's, 1859.....	104½
Erie income 7's, 1855.....	92½
Erie convertible bonds, 7's, 1871.....	8½
Hudson River 1st mort., 7's, 1869.....	102
Hudson River 2d mort., 7's, 1860.....	94
New York and New Haven 7's, 1861.....	102
Reading 6's, 1870.....	76½
Reading mortgage, 6's, 1860.....	80
Michigan Central, convertible, 8's, 1860.....	104½
Michigan Southern, 7's, 1860.....	90
Cleveland, Col. and Cin. 7's, 1859.....	103
Cleveland and Pittsburg 7's, 1860.....	95
Ohio and Pennsylvania 7's, 1865.....	95
Ohio Central 7's, 1861.....	99

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Feb. 4.	Feb. 11.
Albany and Schenectady.....	96	96
Boston and Maine.....	105½	105
Boston and Lowell.....	108	109
Boston and Worcester.....	100½	99½
Boston and Providence.....	86½	87
Baltimore and Ohio.....	64	64
Baltimore and Susquehanna.....	34	—
Cleveland and Columbus.....	—	—
Columbus and Xenia.....	—	—
Camden and Amboy.....	—	—
Delaware and Hudson (canal).....	110	113
Eastern.....	95	94½
Erie.....	79½	78½
Fall River.....	98½	98½
Fitchburg.....	103½	103½
Georgia.....	—	—
Georgia Central.....	—	—
Harlem.....	67½	67½
“ preferred.....	110	109
Hartford and New Haven.....	125	124
Housatonic (preferred).....	38	38
Hudson River.....	65	64
Little Miami.....	—	—
Long Island.....	19	18½
Mad River.....	—	—
Madison and Indianapolis.....	90	92
Michigan Central.....	98	96
Michigan Southern.....	103	100
New York and New Haven.....	113	112½
New Jersey.....	130	130
Nashua and Lowell.....	104	104
New Bedford and Taunton.....	115	116
Norwich and Worcester.....	51½	50½
Ogdensburg.....	28	27½
Pennsylvania.....	—	—
Philadelphia, Wilm'gton & Balt.....	29½	29½
Petersburg.....	—	—
Richmond and Fredericksburg.....	—	—
Richmond and Petersburg.....	—	—
Reading.....	66	67½
Rochester and Syracuse.....	109½	119
Stonington.....	50½	51½
South Carolina.....	—	—
Syracuse and Utica.....	130	128
Taunton Branch.....	111	113
Utica and Schenectady.....	125	127
Vermont Central.....	25½	24½
Vermont and Massachusetts.....	25½	23½
Virginia Central.....	—	—
Western.....	101½	100½
Wilmington and Raleigh.....	56	58

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Indiana Central Railroad.

The Indiana Central railway company was organized in March, 1850 to construct a railway from the line dividing Indiana and Ohio at the termination of the Dayton and Western railway, to Indianapolis, 72-67 miles. The company has caused the entire line to be surveyed and located by H. C. Moore, a most scientific engineer, following the line of the National road, and most of the way not more than 40 to 60 rods from it. The railway line is shorter than the National road, and 67-84 miles of it perfectly straight, and only 3-83 miles easy curves; the least radius being 1,547 feet, and the maximum grade at the rate of 58 feet per mile, which occurs only four times for short distances. This line was originally a part of the Terre Haute and Richmond railroad line, and was separated for the purpose of construction, with power to reunite, and to consolidate with any other railway company making or having made a railway, within or without Indiana, running in the same general direction. The Terre Haute road is now about finished, and when the Dayton and Western railway shall be finished, which will be done early next summer, the line of the Indiana Central railway will be necessary to make the connection between them, and will pass through from Dayton, in the valley of the Great Miami, to Terre Haute, on the Wabash, 185 miles, through the most fertile, best improved and wealthiest portion of the great west, and near the line of the great National road, projected and opened by the United States, on the great line of travel, emigration and mail transportation, through Maryland, northern Virginia, southern Pennsylvania, central Ohio, Indiana and Illinois. It was only selected by the United States government for its great importance as a national thoroughfare, and by compact with the new States of the northwest, two per cent of the net products of sales of public lands in those States was set apart to construct it. The government, however, has failed to complete the road through western Ohio, Indiana and Illinois, and the energetic population attracted to the line, are engaged in constructing railways from Washington city to the Mississippi, opposite St. Louis, running the whole distance near the line projected by the United States. The people are emphatically distancing the government in enterprise, and their line must be the great travelled line from the great central valleys of the Mississippi and its tributaries, for all those going to the seat of government—congressmen, office-holders, office-seekers, and persons who from curiosity or business may desire to take Washington city in the line of travel. It also passes through the capitals of Indiana and Ohio, and there are numerous railways leading into and diverging from this great line to every portion of the west in one direction, and the eastern cities in the other.

The Indiana Central railway forms one of the most important links in this immense chain of railways. The charter of the company is of the most liberal kind, and the capital and profits unlimited. The stock taken and that greed to be received by contractors, exceeds \$400,000, whilst the grubbing, grading and bridging preparatory to laying down the iron is estimated at \$292,725. The whole line, except about nine miles, is under contract for the preparing of the road for laying the rails at prices on the average below the estimates; and without some unforeseen drawback the part under contract, 63 miles, will be ready for the iron within this year.

The valuation and assessments of real and personal property, church, college, seminary and common school property in the counties in Indiana that this railway passes through and touches, as taken from the last census, and assessment return is \$37,954,331.

Number of bushels of wheat produced...	738,583
Indian corn and other grains.....	6,801,415
Tons of hay.....	37,921
Number of horses.....	32,811
" cattle.....	73,674
" sheep.....	110,882
" hogs.....	263,320

The wheat crop for the year the census returns were made was almost a failure, and no doubt is felt by those well informed but that the product of wheat for 1851 was two millions of bushels. This estimate only includes the returns of six counties immediately on the line of the railway. The contiguous counties are equally productive, and in some things would show an increased production. There are no less than 8 railways centering at and diverging from Indianapolis, the western terminus of this line, which crosses the Whitewater Valley canal, and the Knightstown and Shelbyville railroad.

Coal for Locomotives.

H. V. Poor, Esq.,

Dear Sir: As the subject of burning coal as fuel on our railroads is at present engaging the attention of those interested, I would like to make your valuable paper a medium of communication with the public on that important subject.

The economy of coal over wood as fuel for steam purposes, is demonstrated beyond a question, as applicable to steamboats and stationary engines, and there is no good reason why there may not be the same economy when applied to our railroads. It has been demonstrated by actual experiment that one ton of coal of 2240 lbs., is equal in steam generating power to 2½ or 3 cords of wood. Now it is only necessary to compare the price of one with the other, to ascertain which is the most economical. In any locality where coal can be delivered at \$5, or less, per ton, it is a cheaper fuel than wood over \$2 per cord; but the average price of wood, in all sections of the country where coal could be had at the above price, is probably over \$4 per cord, which for 2½ cords would be \$10, just double the cost of one ton of coal capable of generating the same amount of steam. Now estimating the amt of cost of the present fuel on railroads to be \$50,000 a year for every 100 miles, the saving of one-half, \$25,000 per 100 miles a year, would amount to the enormous sum of one million five hundred thousand dollars a year to the railroads which could be supplied with coal at the above price. Now it will be asked why do not our railroads use coal if it is so much cheaper? I answer, some difficulties have been discovered in adapting the ordinary boiler of a locomotive to burn coal, and many modifications have been tried to overcome them, but all have been so complicated, that the liability to get out of order, and consequent loss of time to repair, have counterbalanced the economy in fuel. The only difficulty of any importance is the burning out of the fire box sides, and ends of the flues, which are exposed to the intense heat of the fire. Now a boiler that can be constructed so that the fire box shall be relieved from this intensity of heat, and at the same time shall not be more liable to get out of order than the present boiler, and have the same facility of repair, is what is wanted. And one object in my calling attention to this subject, is to say

that I have the plans for constructing a boiler applicable to the locomotive for burning coal, which avoids the difficulty, and is so simple in its construction, and all its parts so easy of access when necessary for repair, that it commends itself to the judgment of every engineer and practical machinist who has seen it. They all say there is no reason why it will not answer the purpose when put into practical operation. Wishing to have an opportunity to do so, I propose to give any railroad company the benefit of the improvement, if they will have it applied to an engine. The cost of altering a boiler already built would be less than \$1,000; but to have it applied to a new one building, would not be over \$300; and a saving of fuel of twice the amount of expense of altering an engine would be realised in one year.

Your obedient servant,

RICHARD E. DIBBLE,

Mechanical Engineer,

74 Franklin st., N.Y.

Circular.

HOUSE OF REPRESENTATIVES OF THE U. S.
Committee Room Post Office and Post Roads,
Washington City, January 15, 1852.

SIR: The House of Representatives having referred to the committee on the Post Office and Post Roads the memorial of Messrs. Duff Green and Ben. E. Green, relative to the issuing of United States coupon bonds to certain railroad companies having mail contracts, that committee has instructed me to address a circular to the several railroad companies in the United States, enclosing with the same the memorial of the Messrs. Green. In accordance with the instruction of said committee, I have the honor herewith to transmit a copy of said memorial. Allow me, sir, to ask that it may receive the consideration of your board of directors, and that, at your earliest convenience, their opinions and suggestions on the subject-matter of said memorial may be communicated to said committee.

Should your company desire to send delegates to the railroad convention to be held in this city on the 1st of March next, as suggested in the circular attached to the memorial of the Messrs. Green, it will enable you to communicate personally, through your delegate much valuable information, as to the details necessarily connected with the subject-matter of said memorial, should any action thereon be advised.

Very respectfully,

EDSON B. OLDS, Chairman R. R. Co.

To ———, Esq., President.

The following is the memorial referred to.

To the Senate and House of Representatives of the United States:

The memorial of Duff Green and Ben. E. Green respectfully represents, that a modification of the laws regulating mail contracts with railroad companies, so as to authorize the Post Office Department to deliver to railroad companies, on perpetual contracts for carrying the mails, an amount of five per cent. coupon bonds, chargeable on the revenues of the Post Office Department, the interest on which, at six per cent., would be equal to the payments authorized by existing laws, would save to the Government on the present rate of expenditure through the Post Office Department, within one hundred years, many hundred millions of dollars, and at the same time furnish a permanent and solid basis for an accumulation of capital under the control of citizens of the United States, which will greatly contribute to the development of the resources, and augment the prosperity, of the people and Government of the United States: That the views of your memorialists are more fully explained in the printed circular of the committee,

and in the letters addressed to Governor Floyd, which are hereto annexed and made part of this memorial. And your memorialists respectfully pray for a modification of the laws regulating mail contracts, as therein suggested.

DUFF GREEN.
BEN. E. GREEN.

Pennsylvania.

Schuylkill Navigation Company.—We learn from the report of the President of this company, that boats first passed through the entire length of the canal on the 1st of April last. Since that period there has been no interruption of the navigation, (with the exception of a delay of four days, caused by an injury done to two of the locks,) although the summer and autumn have been attended with an extreme and almost unprecedented drought.

The business of the year has been as follows:—

Anthracite coal carried, tons.....	579,156
Miscellaneous articles descending.....	174,399
Miscellaneous articles ascending.....	87,542

Total tonnage.....841,097

This is the greatest tonnage ever passed over the work, and exceeds that of any previous year by 104,580 tons; the quantity carried in 1841, being 737,517 tons, of which 584,692 tons were anthracite coal; the coal tonnage of 1851 being only 5,536 less than that year.

Of the coal carried in 1851, there were 112,697 tons delivered at points along the line short of the city of Philadelphia. The greatest tonnage of any week, was 27,796 tons, and the largest load of any boat 188 tons.

The toll on coal amounted to \$218,660 17, and on other articles to \$66,961 07, making a total of \$285,621 24.

The amount received for rents of real estate and water power, was \$23,480 38.

The tools and materials on hand at the close of the year 1850, in the car repair shop of the company, were sold to the contractors for repairing the cars for the sum of \$7,563 87. The sum of \$15,202 95 has been credited on account of drawbacks allowed by the Delaware and Raritan canal company, on anthracite coal carried to the waters of New York bay, by way of the Schuylkill Navigation and their canal. These several items make an aggregate income for the year of \$331,868 44.

The charges against this aggregate income have been as follows:—

Current expenses of canal and works, salaries of officers, lock-tenders, wages, and office expenses.....	\$90,941 90
Car and landing expenses.....	45,002 13
Drawbacks allowed on tolls.....	9,771 46
Drawbacks paid to boatmen.....	20,172 10
Interest paid.....	21,953 29

Total.....\$187,840 88

And leaving a balance of.....\$144,027 56

The cost of the repairs of the works from the injuries caused by the floods of July and September was \$357,390 19.

Of the amount required to pay for these repairs \$151,615 89 were raised by the subscriptions of the stockholders and loanholders, and the balance by obtaining materials, etc., on credit, and by borrowing money on the notes of the company, with a stipulation that such notes should be receivable for tolls.

Of the obligations of all kinds contracted for the repair of the works, the sum of \$222,099 72 remains unpaid, showing that out of the restricted income of the year, the sum of \$135,290 47 of the repair debt has been paid off.

The repairs were thorough, and it is believed that the entire line is now in complete order, and well calculated to resist the effects of future casualties.

The cause of the restricted income just mentioned, was the low rate of toll that it was found necessary to adopt for the charge on anthracite coal, the average of which did not produce quite 38 cents per ton. Had the toll on anthracite coal remained as it was fixed at the commencement of the season, it is estimated that the income of the company, for the same tonnage, would have been \$105,000 more than it actually reached.

The whole quantity of anthracite coal mined and sent to market during the past year exceeded 4,200,000 tons. The extensive use—that is now being made of this kind of coal for locomotives and marine purposes, will probably require a supply of at least 4,800,000 tons for the year 1852.

Compared with the other channels for supplying this quantity, the Schuylkill Navigation has the largest capacity for an increase of tonnage, and it is the confident expectation of the managers, that business will be offered to them to the full extent to which they can supply boats for the transportation of coal.

From an investigation of the weekly returns of the coal tonnage, it appears that the coal boat capacity is 55,440 tons. According to the course of trade, and the ordinary average of the trips, in time and distance, each ton of the boat capacity is competent to carry about 14 tons.

This would accommodate a trade of 776,160 tons of coal; and counting other boats which have not been in use for a part of the past season, the whole amount of trade, which could be accommodated, would be about 800,000 tons.

The company have made arrangements for the purchase of a number of new boats of 140 tons and upwards, in order to meet the large trade which the coming season has in store.

The future prospects of the company are very encouraging, and there is reason to hope that they will soon be able to repair the damages sustained during the past year, and free themselves from all debts and incumbrances.

Massachusetts.

Fitchburg Railroad.—The annual meeting of the Fitchburg company will be held on Tuesday next, and the report of the directors has just been published. The following particulars are from the report:—

Capital stock.....	\$3,540,000 00
Debt of the company.....	122,443 50
Assets of ".....	215,831 53
Earnings for 1851.....	558,545 91
Expenses—including for new cars, turnouts, etc., over \$53,000.....	312,922 22
Surplus fund, in assets.....	43,234 92
Due from other companies.....	5,000 00
Total surplus.....	48,234 92
Increased income over 1850.....	21,652 73
" expenses and charged to reserved fund.....	84,467 68

The directors say—"It will be seen from the above statement, that the amount charged to expenses and reserved fund, the past year, exceeds that of the previous year \$84,467 68; and that of this amount \$53,005 00, was for new work, new cars and other extraordinary expenses not applicable to a single year. The directors thought it would be more for the interests of the corporation and more satisfactory to the stockholders, when they understood the matter, to charge this large amount at once to expense account and to the reserved fund and reduce the dividend, than to

make a debt by charging any part of it to construction account."

Collins' Line of Steamers.

The Washington Union gives the following figures of the results of the Collins line of steamers. They are said to be given under oath of the book-keeper of the company. They show, certainly but a Flemish account, and prove if the line is to be kept up, it must have further assistance from Congress.

The cash cost of the Collins line of steamers ready for sea was.....\$2,944,142 71
While the present condition of the company is as follows, viz:

Of the whole amount of stock subscribed (\$1,132,000) there was paid in.....	\$1,099,900
The Government loan was.....	385,000
The company have borrowed and issued bonds for.....	700,000
Their floating debt is now, exclusive of interest, say.....	1,000,000
	<hr/> 3,184,900 00

The company, therefore, have sunk.....350,000 00
And no dividends have been paid to stockholders.

The actual average cost of each voyage to England and back is.....	65,215 64
The actual receipt of each voyage has been.....	48,286 85

Deficiency each voyage.....	16,928 7
Or for twenty voyages.....	338,574 4

The writer in the Union gives the following table, showing that the Post Office contract with the Cunard steamers is a source of revenue, instead of a charge to the British Government.

During the first six years of the establishment of the Cunard line of steamers, the British Government received from that line in the shape of postages.....	\$7,836,800 00
While the compensation received by the line from the Government was only.....	2,550,000 00

The clear revenue derived by the British Government from those steamers was, therefore.....5,286,800 00

During the first four months of the year 1851, when the Collins line was taking alternate trips with the Cunard line, our Government received all but seventeen hundred dollars in postages of what it paid to the line for carrying the mails. But the British line commenced making weekly trips, and the Collins line no longer alternating with the British, the American postages fell off, as might have been expected. The British line was considered the regular line, at least by the British General Post Office, and the American steamers were treated as transient vessels. It is for this reason that our Post Office Department has given notice to the British that we require a new postal arrangement with England which shall secure reciprocity, provided our steamers by alternating with the British, are able to perform half the service.

The effect of the establishment of the Collins line of steamers on the commercial interests of the country is thus sketched.

When the Cunard steamers first began to ply, they charged as high as £10 and £12 sterling per ton. As soon as the Collins line started these freights came down to £7 10s.; and now freights from England to the United States are reduced to £4, and from the United States to England to anything that may be obtained—from 6d. a bbl. of flour to 2s. 6d. a bbl. Considering that freights are the greatest obstacle to the free interchange of commodities, I would respectfully submit whether the Collins line of steamers from New York to Liverpool has not stimulated trade in general, and by shortening the passages, benefited especially the

trade in Provisions and Breadstuffs. Apples, Lard, Cheese, Beef, etc., are now carried out to England at a mere nominal freight, and because steamers admit of a superior ventilation, arrive out in a state of perfect preservation. It is a great mistake, therefore, to suppose that it is merely the seacoast and the Atlantic States which are benefitted by a regular American steam communication with England. The West and the South are equally benefitted by it. Western Provisions have been carried in the Collins line from New York to Liverpool for less than they could be sent from Albany to the city of New York.

Trial of Locomotive Engines.

Some time since, we gave a brief notice of the trial instituted in October last, by the New England Association of Railway Superintendents, upon the disused track of the Boston and Maine railroad, for the purpose of testing the capacity of several locomotive engines for speed and draft. We have now received the report of the committee appointed to report upon the trial, and award the prizes to the successful engines. Below we give from the body of the report what is of chief interest to the reader:—

The trial of speed was made upon that part of the Boston and Lowell railroad which lies between the 15th and 24th mile posts, numbering from Boston.

The rules adopted were—

1st. That all engines upon this trial should carry the same load over the same distance.

2d. That the pressure of steam in the boilers should not exceed one hundred and twenty, nor be less than seventy pounds, per square inch.

3d. That the pressure at starting, should be taken as the pressure under which the engine worked over the whole distance; the safety valve balances remaining unaltered.

The constant load in the trial of speed, consisted (besides the tender) of six covered freight cars, each loaded with five tons, one long passenger car, and twenty-one passengers; the whole weighing eighty-five tons.

This constant load caused a displacement of 17,690 cubic feet of air; being in length two hundred and twenty-one feet, height ten feet, width eight feet.

Each engine with its train started from the fifteenth mile post, at a given signal, and made its best time to the twenty-fourth mile post, where the observations terminated.

To reduce the observed time of running to the time in which the distance should have been run, consistently with the published terms, (viz., to reduce in proportion to the weight of the engine and pressure of steam,) it became necessary to adopt some formula by which the reduction could be made. We have not the means of proposing an exact formula for this purpose, as we have not at our command experiments upon which to base the necessary computations. We have therefore used an empirical formula, which we believe to be sufficiently accurate for the purposes of comparison; as the errors cannot amount to enough to involve injustice to either of the parties interested in the result. This formula is based upon the assumption that an engine of 25 tons weight, under an effective pressure of 100 lbs to the square inch, would upon this track, without load other than the tender, run the observed distance, at the rate of eighty miles an hour, or in four hundred and five seconds.

The standard assumed, and the load and distance being constant, it is only requisite to apply the correction in time, due to the variable weights and pressures of the different engines.

For this purpose, the following proportion was used:—

$$1 : \left(\frac{2WP}{10,000,000} \right) - 1 :: t - 405'' : \text{correction,}$$

[the correction being plus or minus, as $\frac{2WP}{10,000,000}$ is greater or less than unity.]

W representing the weight of engine in pounds; P the effective pressure of steam in boiler, in pounds

per square inch; t the observed time in seconds.

It will be noticed upon comparison, that the reduced times follow generally in order with the observed times, after the proper corrections for differences of weight and pressure have been made.

We have confidence that equal justice has been done to all, with the exception of the Addison Gilmore, of the Connecticut and Passumpsic Rivers railroad.

This engine was worked at a much higher pressure than the others, and would, under equal circumstances, have had a decided advantage; but as she had just come from the shop, and never before been attached to a train, it is difficult, if not impossible, to arrive at a correct estimate of her power, as compared with the others; to which is to be added the consideration that she was worked at a pressure above that proposed by the published rules.

We have given the results of the trial of this engine, but have not included it as competing for a prize, since it did not come within the prescribed rules.

The Dedham, a small tank engine, built by G. S. Griggs, of the Boston and Providence railroad, was run over the same track, on the day after the trial of the other passenger engines, with a load of two passenger cars, and eighty-one passengers, making an entire weight of eighteen tons.

The time in which this engine passed over the nine miles, is given in detail with the others; but with such a disproportioned load, we think it inexpedient, with our present means of judging, to make any comparison.

We regret this, as we believe that on many of our roads, engines of this class must be introduced for economical reasons, before full accommodation can be given to the public, or remuneration to the stockholders.

The trial of the freight engines was made upon the branch track connecting the Boston and Lowell railroad and the Boston and Maine railroad at Wilmington, over a distance of nine thousand one hundred feet in length. The load consisted of one hundred and fourteen loaded cars, estimated to weigh, cars included, six hundred and fifty tons.

Each engine first backed this train down to the starting point, which was at the top of an inclined plane of fourteen feet to the mile; and from this point they started at a given signal, making their best time to the point at the other extremity of the branch.

For the reduction of these engines, we have used the same formula as in the preceding case; with the exceptions, that the standard time is taken at one hundred and forty-four seconds instead of four hundred and five seconds, and the pressure shown by the balances, instead of the effective pressure.

The limited time we had to prepare for these experiments, must be our excuse for their being so incomplete in detail and arrangement. And the want of direct experiment, to determine the basis upon which to ground absolute formulas, prevented us from making more than a comparative statement of the performances of the engines of both classes.

We take the liberty of expressing our regret, that so great a deficiency exists in our knowledge, in this department of railroad management.

The power applied for the purpose of transportation on railroads is very large, and upon its proper application depends, in a great degree, the success of this great interest in this section.

It is apparent, even to a casual observer, that the railroads have increased in a greater ratio than the amount of business they can have to do. It becomes, therefore, of vital importance, that the greatest possible saving should be made in all the details of working and maintenance; and in the case under consideration, that the weight of the engines should be reduced, and their power increased to the greatest limit consistent with the proper durability of the machines.

We trust that this experiment will be followed up by those interested, until a series of observations properly made, may enable railroad managers to judge with certainty, having actual, and not theoretical knowledge for their guide.

It was our intention to have prepared instruments for the purpose of measuring the power and draft directly; and also certain apparatus for testing the

steadiness with which the machines run upon the track.

Some progress was made, but we were unable to get them completed in season for use. Should they be wanted in future experiments, it will take probably but a short time to perfect them.

In conclusion, we indulge in the hope, that these experiments may be the commencement of a series, which will ultimately lead to a more perfect knowledge of the capabilities of the locomotive engine; and in practice, to a greater economy of power in working this important machine.

The comparison of these experiments with those made in England in 1830-31, will show the great increase of speed already attained, as compared with the weight of the engine and the load carried; and will be an incentive to further improvement.

The distance run by the Passenger Locomotives in the trial was a little over 9 miles. There were no grades exceeding 9.500 feet to the mile, nor curves with a less radius than 3,000 feet, and about three-quarters of the distance was a straight line.

The following is a statement of the comparative time made by the several competing passenger engines, viz:—

	Minutes.
Neponset.....	13:25
Nathan Hale.....	13:30
Addison Gilmore, W.....	11:29
Union.....	13:28
Addison Gilmore, M.....	14:25
Essex.....	14:33

The time made by the freight engines was as follows:—

	Minutes.
Milo.....	10:24
St. Clair.....	10:54
Highlander.....	12:38

The weight of passenger engines was as follows:—

	Tons.
Neponset.....	43,775
Nathan Hale.....	47,093
Addison Gilmore, W.....	50,885
Union.....	46,990
Addison Gilmore, M.....	46,320
Essex.....	48,470

	Freight Engines.
Milo.....	38,900
Highlander.....	40,015
St. Clair.....	48,650

A table showing the dimensions of the several engines will be given in our next.

Of the passenger engines, the first medal was awarded to the Addison Gilmore, from the Western road; the second to the Nathan Hale. Of the freight engines, the first medal was awarded to the Milo; the second to the St. Clair.

Indiana.

Lawrenceburgh and Cincinnati Railroad.—The board of directors of the above company have been in session at this place for several days past. The most important business transacted was the letting out the building of the road, including the furnishing cross ties and laying the track from St. Omer to this city, a distance of 38 miles. The contract has been taken by our well-known fellow citizens, Andrew Wilson, Lawrence M. Vance, and Harvey Bates, whose energy and ability give full assurance that the work will be completed in contract time, which we learn is the 1st of July, 1853.

This completes the entire line to Lawrenceburgh, the portion between St. Omer and the river having for some time been under contract.

The terms of this contract are extremely favorable to the company, the contractors taking nearly all their pay in the stock and lands of the company thereby manifesting their faith in the importance of the undertaking and its paying ability.

To enable the company to press their work rapidly to a completion, the company desire to take up new subscriptions of stock, and propose to make them payable one-fourth when the first division of

17 miles is completed, and in running order, one-fourth when completed to Shelbyville, and the residue when completed to this place. Now is the time for our citizens to come forward and assist in this important undertaking. The terms of this subscription are liberal, and the money only to be paid as portions of the road are brought into actual use. Our farmers and traders are particularly interested in these matters, and as yet our city and county have not done for the cause one-third as much as the county of Decatur. Surely we are as able and we ought to be as willing.

In connection with this work, it is proper to notice the favorable indications for an early connection with St. Louis and Terre Haute. The road to Terre Haute lacks only four miles of completion, one week of fair weather will put it through, and we learn that the friends are active and have secured the right of way for the greater part of the distance to St. Louis, and a speedy prosecution of that end may be looked for.—*State Journal*.

Quebec and Richmond Railroad.

The necessity of a railroad to connect Quebec with western Canada has long been felt, but active steps were not taken upon the subject until the year 1849. The city of Quebec then passed resolutions to loan £100,000 to any company formed, or to be formed, for the purpose of constructing a railroad from Quebec to Melbourn, there to connect with the Atlantic and St. Lawrence railroad, running between Portland and Montreal. This loan was made on the condition that two lines should be surveyed between Quebec and Richmond—one by Portneuf and Point Platon, the other by Cap Rouge and St. Nicholas. The expense of these surveys was to be divided equally between the company and the City Council, and the selection of the line after survey was left to the council. The reconnaissance of the two routes was entrusted to Mr. A. C. Morton, who decided in favor of that by Cap Rouge and St. Nicholas to Richmond, which line was first adopted, but afterwards abandoned.

The total distance of the road from Richmond to the city of Quebec by this survey is 101½ miles.—The estimated cost of construction is £520,000. A large portion of the road, equal to 60 per cent of the whole, will be either level, or of an inclination not exceeding 15 feet per mile. There are no grades to exceed 30 feet per mile, except the approach to the river St. Lawrence, and for a short distance at Richmond, where a grade of 50 feet per mile is required.

The ceremony of breaking ground on this road took place on the 7th of January last, immediately after which active operations were commenced.

The number of stockholders on the 31st December, 1851, was 396, who subscribed for 1,748 shares, amounting to £21,850. No instalments have been paid on 575 shares, and on the remaining 1172 shares, there has been received £1,002 11s. 3d. in cash, and £1,762 10s. in bills receivable, making £2,765 1s. 3d. received on account of instalments. From sundry individuals there has been received £86 10s., forming together the sum of £2,851 11s. 3d. The total expenditures of the company have been £1,844 0s. 4d., leaving a balance of £1,007 10s. 11d., of which £175 0s. 11d. are in cash, and £832 10s. in bills receivable.

After completing the reconnaissance already referred to, Mr. Morton resigned the further charge of the work, from the pressing nature of his duties as Chief Engineer of the Atlantic and St. Lawrence, and other roads in Maine, Mr. R. T. Bailey, well known in the United States as a skillful and accomplished Engineer placed at the head of the engineering department, a position which involved great responsibility, from the difficult nature

of the duties imposed, and from the fact that the interests of the people of Quebec were supposed to be adverse to the best line to be adopted. They were opposed to making *Point Levi*, on the opposite side of the river, the terminus of the road, for fear that it would draw off the business from the Quebec side. Elaborate and critical surveys were therefore made for the purpose of ascertaining the practicability of crossing the river at some point above the city for the purpose of bringing the cars into it upon the north side. The result of the surveys, however, proved the great difficulty in accomplishing the object, owing partly to the great width and depth of the river, and the difficulty in descending to it from the table lands, which instead of sloping gradually, extend themselves almost to the river bank. The surveys showed that by taking advantage of the depressions caused by the Richelieu and Elchemin rivers, a comparatively easy grade could be obtained to Point Levi, which route, at the recommendation of Mr. Bailey was adopted. The reasons given by him for a change of line were most satisfactory, and received the full approval of the company.

The prospects of the road, in the opinion of Mr. Bailey, are very encouraging.

It forms a communication between Quebec and Montreal, and as it is but little longer than the distance by the river, it will be a speedier and more desirable route.

The position of Quebec as a great commercial city will ensure to this road a large amount of traffic; for nearly all the freight conveyed thither for exportation from western Canada will take this route. The same is true of imported articles seeking the interior.

A very large passenger traffic may be expected during the summer season, from the immense number of pleasure tourists who annually visit the St. Lawrence, and the cities of Montreal and Quebec. The inhabitants of the latter city, wishing to visit the United States, will find the Quebec and Richmond, in connection with the Portland and Montreal railroad, the shortest and best route.

When the Halifax and Quebec railroad is completed, this road will occupy a central position in the great trunk line through the provinces, and the larger portion of European or other travel which will be drawn from either direction will pass over it.

With such prospects for the future, the Quebec and Richmond railroad may be regarded as a profitable scheme.

Pennsylvania Railroad Company--Stockholders Annual Meeting.

Yesterday morning, the annual meeting of the stockholders of the Pennsylvania railroad company took place in Sanson street Hall.

On motion of C. Fallon, Esq., the Hon. Charles Gilpin, Mayor of the city, was called to the chair, and Charles Wood and Samuel Elkin were appointed secretaries.

The annual report was then submitted by the president of the board of directors, William C. Patterson, Esq., and read to the meeting. The document gave a valuable and highly interesting account of the affairs of the company, and of the transactions during the year which has closed.—From it we learn that the receipts from the stock in payment of instalments amounted to \$8,103,465, and the disbursements to \$7,978,089.82; leaving a balance of \$125,375.18. The interest accounts, it is stated, exhibit results equally gratifying. Of unconditional subscriptions to the stock, the total amount is \$8,326,050, and the contingent subscriptions amount to \$750,000. The subscription by the corporation of the Northern Liberties is \$250,

000, and the stock payable to contractors amounts to the same, viz: \$250,000. Thus the aggregate of all subscriptions to the stock is \$9,576,000. To fill up the capital stock to the present limit, the report states that a further subscription of stock will be necessary to the amount of \$423,950.

The cost of a single track from Harrisburg to Pittsburg is estimated at \$12,000,000, and an additional track is estimated to cost \$3,600,000. In August last, a section of the western division of the road, extending from Eatontown to Lockport, a distance of twenty-one miles, was opened, and the whole of that division is now in use throughout its entire length, except from Beatty's station to Turtle Creek, in Westmoreland county, a distance of twenty-eight miles.

The report states that the board confidently anticipate the completion of the whole of the road, to be ready for use before the close of navigation in the year 1853. To do this, however, the stock of the company, it is stated, must be increased, or a debt incurred to the amount of about \$6,000,000; and as the whole policy of the board, since the commencement, has been, and is, in opposition to the incurring of debt, they recommend that an application be made to the State Legislature for authority to make such an increase of the stock of the company as may be necessary for this purpose. The report concludes with some forcible remarks upon the importance of securing to this city the trade of the West, to do which, it was urged, low fare and freights are absolutely necessary.—*Pennsylvanian of the 3d*.

There has been a change in the board of directors. Mr. John Edgar Thompson, the well known Civil Engineer, succeeds Col. W. C. Patterson, as President, and Messrs. George W. Carpenter, C. E. Spangler, John Yarrow, W. Butcher, David S. Brown, and Thomas T. Lea, are on the reformed ticket for directors.

Commerce of Buffalo.

The Buffalo Commercial Advertiser says:—On the 31st Dec. last, there were owned in the district of Buffalo Creek, 22 steamers and 22 propellers—making an aggregate of 44 steam vessels, of 22,438 87 tonnage, and carrying crews of 903 persons; and also, 104 brigs and schooners, of an aggregate tonnage of 23,818 52, and employing crews of 778 persons. There was also building at that date, in the different ship yards of this city, an aggregate of over 7,000 tons of steam and sail vessels.

The valuation of the commerce at this or any other point, is but guess work, at best, though a pretty near approximation may be reached. We take the custom-house estimates, which are made up from as reliable data as can be obtained.

Total value of imports by lake.....\$31,880,951
Total value of exports by lake.....44,201,720

Aggregate western commerce.....\$76,032,671

To which, if we add the exports from
Tonawanda, 5,337 tons, valued
at.....\$1,792,423

Imports at Tonawanda, 113,211
tons.....3,089,663—4,882,086

And Dunkirk say.....8,000,000

We have the total commerce of the Dis-

trict of Buffalo Creek, amounting to \$88,964,757

The full returns from Dunkirk are not yet received, but as the merchandise and other freight transported west over the Erie Railroad alone amounts to \$5,394,780, the aggregate cannot fall far short of \$8,000,000. The total western exports of this district amount to \$51,228,922, without taking into account the erroneous quantity of valuable goods transported by the different express companies, the tonnage of which does not appear on any other books than their own, and which is not kept there in such a manner as to admit of the estimation of its value. No doubt the full returns from the whole district, with the exact valuation, would allow a traffic of \$90,000,000.

The value of the exports by canal, as made up at the collector's office, is \$18,984,423, on which tolls were collected amounting to \$777,166 86.

The value of the imports by canal, and made up at the same office, is \$41,810,398, with an aggregate tonnage of 237,341 tons.

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tusculum and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND
NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, including all the materials. And also for the mechanical work, excluding timber only.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boat-drawn) 3 miles above the bridge site, and Clay of a good quality is found convenient. Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. MCKETHAN,
J. D. WILLIAMS, } Committee.
D. G. McRAE,

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852.

1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic
Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply, at the Company's Terminus at Longueuil, of the following description of RAILWAY CARRIAGES, viz:

One hundred and twenty Baggage Carriages, enclosed, on Iron Trucks with lateral motion. Ninety Platform Carriages, on Iron Trucks.

To be correspondent in other respects to pattern Carriages of the respective kinds, to be seen on the Road.

The Tenders may apply to the whole or any part of the supply, and the delivery must be made at the following dates: one-third at 1st May, 1853—the remainder 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic
Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed, "Tenders for Passenger Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply at Longueuil, of the following RAILWAY CARRIAGES, viz:

Six First Class Passenger Carriages.
Five Second Class "
Three Post Office and Express Carriages.
Five Covered Luggage Vans.

To be correspondent to Carriages of the respective descriptions now on the road.

One-third to be delivered by the 1st May, 1853; the remainder by the 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic
Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N. Y., a very superior article of Hydraulic Cement—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N. J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS.

Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Inventors.

\$3,000 REWARD.—To MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

\$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

\$800 for the best method of excluding dust from cars when in motion.

\$400 for the best railroad brake.

\$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed.

F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS.

Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,

23 Courtlandt st., New York.

October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851.

3m.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of \$800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Colum-

bia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. **WM. E. MORRIS, President.**

THOMAS B. TAYLOR, Secretary.
Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS.,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,
Equally applicable to light and heavy Bearings,
Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no Gum upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE \$1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee

of the Improved Lubricating Compound:
Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gam" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.
Yours, very respectfully, **G. A. NICOLLS,**
Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman All're Works.
J. BREASTED, Manager All're Works.

Steamship Southerner, New York, May 1, 1851.

Sirs,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, **WILLIAM ENGLISH,**
Supt Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.
By his Attorney, **G. M. KNEVITT.**
New York, 1851.

Boiler Plates and Axles,
MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by
WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by **B. H. Bartol, Engineer**, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.